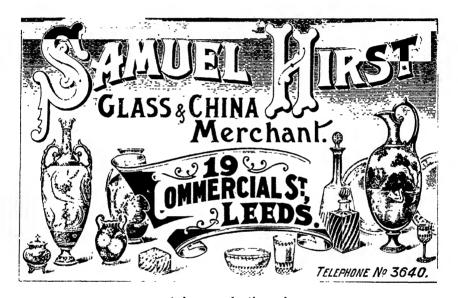


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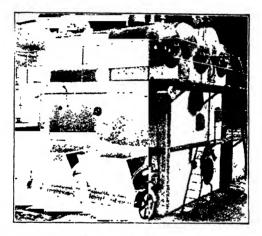
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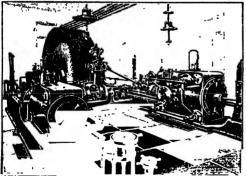
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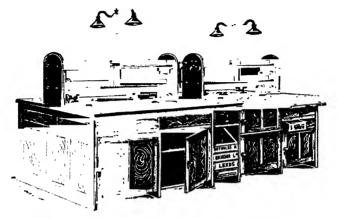
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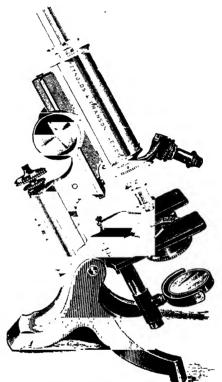
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CALENDAR, 1907-8

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#### ALMANAC, 1907-8

#### SEPTEMBER, 1907

1 2 3 4 5 6 7	S M Tu W Th F S		
8 9 10 11 12 13 14	S M Tu W Th F S		
15 10 17 18 19 20 21	S M Tu W Th F S	Supplementary Intermediate examination and Science, and 1st M.B.	in Arts
22 23 24 25 26 27 28	S M Tu W Th F	Evening Class session begins.	
29 30	SM	First Term begins. Admission of Students. for sending in Essays for Gladstone Prize.	Last day

#### OCTOBER, 1907

			OCTOBER, 1907
	1 2 3 4 5	Tu W Th F	Admission of students. Entrance examinations at 10 a.m. and 2 p.m. First Term in School of Medicine begins.
	6 7 8 9 10 11	S M Tu W Th F	Meeting of Finance Committee.
	13 14 15 16 17 18	M Tu W Th F S	D.P.H. examination begins. Winter course in Agriculture (First Term) begins.  Meeting of Board of Faculty of Arts.  Meeting of Council.  Meeting of Board of Faculty of Medicine.
and the same of the same of	20 21 22 23 24 25 26	S M Tu W Th F S	
	27 28 29 30 31	S M Tu W Th	Meeting of Board of Faculties of Science and Technology.

# NOVEMBER, 1907

	_		
1 2	F S		
3 4 5 6 7 8 9	M Tu W Th F S	Admission of Yorkshire College to Victoria University, 1887.  Meeting of Senate.	
10 11 12 13 14 15	S M Tu W Th F	Meeting of Finance Committee.  Meeting of Board of Faculty of Medicine.	
17 18 19 20 21 22 23	S M Tu W Th F S	Meeting of Board of Faculty of Arts.  Meeting of Council.	,
24 25 26 27 28 29 30	S M Tu W Th	Last day of entry for D.P.H. and Final M.B. examinations.  Meeting of Board of Faculties of Science and Technology.	

#### DECEMBER, 1907 S 1 M 2 3 Tu W Meeting of Senate. 5 6 Th $\mathbf{F}$ S S 8 м 9 Tu 10 W 11 Final M.B. examination, Parts I and II, begin. D.P.H. examination begins. Meeting of Finance Committee. Th Terminal Examinations in Faculties of Arts, Science and 12 Technology begin. F 13 S 14 S 15 М 16 Tu 17 Meeting of Board of Faculty of Arts. 18 W Meeting of Council. Th. 19 First Term in Faculties of Arts, Science and Technology 20 Meeting of Board of Faculty of Medicine. First Term in School of Medicine ends. S 21 Winter course in Agriculture (First Term) ends. S 22 23 М Tu 24 Library closed until January 1. W 25 CHRISTMAS DAY. Th 20 27 28 F. S S 29 30 M Tu 31

			JANUARY, 1908	
	1 2 3 4	W Th F S	Library re-opened.	
	5 6 7 8 9	S M Tu W Th F S	Winter course in Agriculture (Second Term) begins.  Second Term in Faculties of Arts, Science and Technology begins. Meeting of Finance Committee.	
	12 13 14 15 16 17	S M Tu W Th F	Second Term in School of Medicine begins.  Meeting of Council.  Meeting of Board of Faculty of Medicine.	
2 2 2	19 20 21 22 3 4 5	S M Tu W Th F S	Meeting of Board of Faculty of Arts.	1
2 2 2	6 7 8 9 0	S M Tu W Th	Meeting of Board of Faculties of Science and Technology. Last day of entry for Clothworkers' Textile Day Scholarships.	, ,

		FEBRUARY, 1908
I	S	
2 3 4 5 6 7 8	S M Tu W Th F	Meeting of Senate
9 10 11 12 13 14	S M Tu W Th F S	Meeting of Finance Committee
16 17 18 19 20 21 22	S M Tu W Th F S	Meeting of Board of Faculty of Arts.  Meeting of Council.  Meeting of Board of Faculty of Medicine
23 24 25 26 27 28 29	S M Tu W Th F S	Meeting of Board of Faculties of Science and Technology.  Last day of application for the 1851 Exhibition Scholarship.

	** ****	MARCH, 1908
3 4 5 6 7	S M Tu W Th	Last day of entry for the June Degree examinations, for City and Guilds Institute examinations, for M.A., M.Sc., and of application for Litt.D. and D.Sc.  Meeting of Senate.
8 9 10 11 12 13 14	S M Tu W Th F S	Last day of entry for Second M.B. examination.  Meeting of Finance Committee.  Winter course in Agriculture (Second Term) ends.
15 16 17 18 19 20 21	S M Tu W Th F	Meeting of Board of Faculty of Arts.  Terminal Examinations in Faculties of Arts, Science and Technology begin. Meeting of Council.
22 23 24 25 26 27 28	S M T i W	<ul> <li>Second M.B. examination begins.</li> <li>Second Term in Faculties of Arts, Science and Technology ends. Last day of application for Renewal of Scholarships.</li> <li>Meeting of Board of Faculty of Medicine.</li> <li>Second Term in School of Medicine ends.</li> </ul>
29 30 31	S M Tu	

# APRIL, 1908

3	·	
5 6 7 8 9 10	S M Tu W Th F S	Meeting of Finance Committee.
12 13 14 15 16 17 18	M Tu W	Evening Class session ends.  Meeting of Council.  Good Friday. University closed. University closed.
19 20 21 22	S M Tu W	EASTER DAY. University closed. University closed. Third Term in Faculties of Arts, Medicine. Science, and Technology begins. Summer course in Agriculture begins.
23 24 25	Th F S	The Charter of the University received Royal Assent, 1904.
26 27 28 29 30	S M Tu W Th	Meeting of Board of Faculties of Science and Technology.

#### MAY, 1908 Last day of entry for the Entrance, Leighton, and Salt F Scholarships, and last day of payment of Fees for June Degree examinations. S 2 S M 3 4 5 6 7 8 Tu W Meeting of Senate. Th F ŝ S I 10 ΙI Tu 12 13 W. Meeting of Finance Committee. Th 14 15 16 F Meeting of Board of Faculty of Medicine. ŝ S M 17 18 19 Tu Meeting of Board of Faculty of Arts. W 20 Meeting of Council. Th 2 I F 22 S 23 S 24 25 26 М Tu W 27 28 Meeting of Board of Faculties of Science and Th Technology. F. 29 S 30 S 31

# JUNE, 1908

	1	
1	М	Last day of entry for the Ch.M. Examination, for the July Matriculation Examination, and for the Infirmary Scholarship.
2	Tu	•
3	W	Meeting of Senate.
3 4 5 6	FS	
U		
7 8	s	WHIT-SUNDAY.
9	M · Tu	University closed. University closed.
ιó	W	Degree examinations in Faculties of Arts, Science, and Technology begin. Meeting of Finance Committee.
11	Th	realistics of the state of the
12 13	F	
	'	
14	S	
15	M Tu	Meeting of Board of Faculty of Arts.  Meeting of Council.
17 18	Th	
10	1 11	Last day of entry for Second and Final M.B. Examinations.
19 20	F S	Meeting of Board of Faculty of Medicine.
20	.,	
2 [	s	
22 23	M Tu	Last day of entry for D.P.H. Examination.
24	W	University of Leeds Act received Royal Assent, 1904.
25 26	Th	
27	S	Third Term in Faculties of Arts, Science and Technology ends. Degree Day.
28	s	
29 30	M Tu	
,.,	• "	

# JULY, 1908

		J D D 1, 1900
1 2 3 4	W Th If S	Second and Final M.B. (Parts I and II) examinations and First Professional examination for L.D.S. begin.  Summer course in Agriculture ends.
5 6 7 8 9 10	S M Tu W Th F	D.P.H. examination begins.  Meeting of Finance Committee.  Meeting of Board of Faculty of Medicine.  Third Term in School of Medicine ends.
12 13 14 15 16 17 18	S M Tu W Th F S	Meeting of Council.
19 20 21 22 23 24 25	S M Tu W Th F	·
26 27 28 29 30 31	S M Tu W Th	

# AUGUST, 1908

	AUGUST, 1908		
I	s	Library closed until August 17. Last day of application for Teachers' Assisted Studentships.	
3 4 5 6 7 8	S M Tu W Th F S	BANK HOLIDAY. University closed.	
9 10 11 12 13 14 15	S Tu W Th F	Leeds University Act received Royal Assent, 1904.	
16 17 18 19 20 21 22	S M Tu W Th F	Library re-opened.	
23 24 25 26 27 28 29	S M Tu W Th F S		
30 31	S M	Last day of entry for the Baines Evening Scholarships, the Supplementary Intermediate examination in Arts and Science, and 1st M.B., and the September Matriculation examination.	

		SEPTEMBER, 1908	
1 2 3 4 5	Tu W Th F S		
6 7 8 9 10 11 12	S M Tu W Th F		
13 14 15	S M Tu	Supplementary Intermediate examination in Arts and	
16 17 18 19	W Th F S	Science, and 1st M.B.	
20 21 22 23 24 25 26	S M Tu W Th F		
27 28 29 30	S M Tu W	Last day for sending in Essays for Gladstone Prize.	
	OCTOBER, 1908		
5 6	M Tu M	First Term begins. Admission of Students. Admission of Students. Entrance examinations at 10 a.m. and 2 p.m. D.P.H. examination begins.	

#### THE UNIVERSITY OF LEEDS

# THE CHARTER

EDWARD VII, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith. To all to whom these presents shall come, greeting.

Whereas by Charter of Her Late Majesty Queen Victoria, dated 20th April, 1880, the Victoria University was founded and constituted having its seat in the City of Manchester.

And whereas the Owens College, Manchester, was thereby constituted a College in the University and provision was made that other Colleges might from time to time be admitted as Colleges in the University in the manner and subject to the conditions therein prescribed.

And whereas the University College, Liverpool, was by resolution of the Court of the University admitted as a College of the University on the 5th November, 1884, and The Yorkshire College, Leeds, was by resolution of the said Court admitted as a College in the University on the 3rd November, 1887, but no other College has been so admitted.

And whereas the said University College, Liverpool, has presented to Us in Our Council a humble Petition under the Common Seal of that College praying us to erect a University within the City of Liverpool.

And whereas the Owens College, Manchester, has presented to Us in Our Council a humble Petition under the Common Seal of that College praying that a new or supplemental Charter may be granted so as to constitute and continue the Victoria University as a University in Manchester without association with any College except the Owens College.

And whereas the Yorkshire College, Leeds, has presented to Us in Our Council a humble Petition under the Common Seal of that College, praying Us to erect a University having its seat in Leeds.

And whereas we have taken the said Petitions into Our Royal consideration and are minded to accede thereto.

Now therefore know ye that We, by virtue of Our Royal Prerogative and all other powers in that behalf enabling us of Our Special Grace certain knowledge and mere motion by these presents Do for Us, Our Heirs and Successors, grant, will, direct, and ordain as follows:

I. There shall be from henceforth for ever in Our said City of Leeds a University of the name and style of "The University of Leeds," which shall be and continue one body politic and corporate with perpetual succession and a common seal and with full power and capacity by and in such name to sue and be sued and to do all other lawful acts whatsoever and with full power and capacity, subject to the restrictions herein set forth, without any further licence to all persons and corporations to assure and to the University to take, by gift or otherwise purchase and hold and also to grant demise or otherwise dispose of real and personal property.

II. The University shall have the powers following:

- 1. To grant and confer Degrees and other academic distinctions to and on persons who shall have pursued an approved course of study in the University and shall have passed the examinations of the University under conditions laid down in its Statutes or Ordinances. Provided that degrees representing proficiency in technical subjects shall not be conferred without proper security for testing the scie. tific or general knowledge underlying technical attainments.
- 2. To admit graduates of other Universities to Degrees of equal or similar rank in the University.
- 3. To confer Degrees of the University on any persons who hold office in the University as Professors, Readers, Lecturers, or otherwise, or who shall have carried on independent research therein, or on any persons who, at the date of this Our Charter, are Associates of the Yorkshire College.

- 4. To grant Diplomas, Licentiateships, Certificates, or other distinctions to persons who have pursued a course of study approved by the University under conditions laid down by the University.
- 5. To confer Honorary Degrees, or other distinctions on approved persons.

Provided that all Degrees and other distinctions shall be conferred and held subject to any provisions which may be made in reference thereto by the Statutes, Ordinances, or Regulations of the University.

- 6. To provide for instruction in such branches of learning as the University may think fit, and also to make provision for research and for the advancement and dissemination of knowledge.
- 7. To examine and inspect schools and other educational institutions, to grant Diplomas and other Certificates, and to provide such lectures and instruction for persons not members of the University as the University may determine.
- 8. To accept the examinations and periods of study passed by students of the University at other Universities or places of learning as equivalent to such examinations and periods of study in the University as the University may determine, and to withdraw such acceptance at any time.

Provided that in no case shall the University confer a Degree in Medicine or Surgery upon any person who has not attended in the University during two years at least courses of study recognised for such Degree, or for one of the other Degrees of the University.

- 9. To affiliate other Colleges or institutions or branches or departments thereof, or to admit the members thereof to any of the privileges of the University, and to accept attendance at courses of study in such Colleges or institutions in place of such part of the attendance at courses of study in the University, and upon such terms and conditions and subject to such regulations as may from time to time be determined by the University.
- 10. To co-operate by means of joint boards or otherwise, with other Universities and Authorities for the

conduct of Matriculation examinations, for the examination and inspection of schools and other academic institutions and for such other purposes as the University may from time to time determine.

- 11. To enter into any agreement with the Yorkshire College for the incorporation of that College in the University, and for taking over its property and liabilities, and, if necessary, to promote a Bill in Parliament to confirm or carry out any such agreement.
- 12. To enter into any agreement with any other institution for the incorporation of that institution in the University and for taking over its property and liabilities, and for any other purpose not repugnant to this Our Charter.
- 13. To enter into any agreement with the Victoria University of Manchester or with the University of Liverpool for the division or apportionment of any of the moneys, endowments, or property of the Victoria University, with due regard to the local origin of any particular foundation, to the wishes of the Donors, and other special circumstances, and for reference to an Arbitrator in case of difference.
- 14. To institute Professorships, Assistant Professorships, Readerships, Lectureships, Teacherships, and any other offices required by the University, and to appoint to such offices. Also to institute and award Fellowships, Scholarships and Exhibitions and Prizes.
  - 15. To license Halls for the residence of students.
- 16. To do all such other acts and things whether incidental to the powers aforesaid or not, as may be requisite in order to further the objects of the University as a Teaching and Examining Body, and to cultivate and promote Arts, Science, and Learning.
- JII. It shall be the duty of the University to co-operate, by means of a Joint Board or otherwise, with the Victoria University of Manchester and the University of Liverpool for the regulation and conduct of Matriculation examinations, including the conditions of exemption therefrom. Statutes of the University shall prescribe and regulate the constitution

and duties of the said Joint Board, the appointment and continuance in office of the members thereof, the filling of vacancies among the members, and all other matters relative to the Joint Board which it may be thought are proper to be so regulated and prescribed.

#### Visitor

IV. We, Our Heirs and Successors, Kings and Queens of the Kingdom and Dominions aforesaid, shall be and remain the Visitor and Visitors of the University through the Lord President of our Council for the time being, and in the exercise of the Visitorial Authority We and Our Heirs and Successors shall have the right from time to time and in such manner as We or They shall think fit to direct an inspection of the University, its buildings, laboratories, and general equipment, and also of the examination, teaching, and other work done by the University.

# Authorities of the University

V. The Authorities of the University shall be the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Court, the Council, the Senate, the Faculties, the Boards of Faculties, and the Convocation. There shall be a Treasurer and other proper officers of the University.

#### The Chancellor

VI. The Chancellor shall be the Head and Chief Officer of the University and President of its Court, Council, and Convocation, and shall, except as otherwise hereby provided, confer Degrees. He shall hold office during his life or until his resignation or until his removal for good cause by the Visitor at the instance of the Court.

Our right trusty and entirely beloved Cousin and Councillor, George Frederick Samuel, Marquis of Ripon, Knight of Our Most Noble Order of the Garter, Doctor of Laws, shall be the first Chancellor of the University.

His successors from time to time shall be elected by the Court on the nomination of the Council of the University.

# The Pro-Chancellor

VII. In the absence of the Chancellor, or pending a vacancy in the office of Chancellor, or during the Chancellor's inability to act, the Pro-Chancellor shall exercise all the functions of the Chancellor, except the conferring of Degrees, and shall, if present, preside at any meetings of the Court and Council. Our trusty and well-beloved Arthur Greenhow Lupton, Chairman of the Council of the Yorkshire College, shall be the first Pro-Chancellor of the University, and shall hold his office for one year. Subsequent appointments to the said office shall be made annually by the Court on the nomination of the Council.

# The Vice-Chancellor

VIII. The Vice-Chancellor shall be ex-officio Chairman of the Senate. In the absence of the Chancellor the Vice-Chancellor shall confer Degrees, except as otherwise hereby provided.

Our trusty and well-beloved Nathan Bodington, Principal of the Yorkshire College, Doctor of Letters, shall be the first Vice-Chancellor of the University, and shall hold such office for such term or terms and subject to such conditions as may from time to time be determined by the Council.

His successors from time to time shall be appointed by the Court on the nomination of the Council and shall hold such office for such term or terms and subject to such conditions as may from time to time be determined by the Council.

# The Pro-Vice-Chancellor

IX. Subject to the Statutes and Ordinances of the University, and in the absence of the Vice-Chancellor, the Pro-Vice-Chancellor may act as Vice-Chancellor. The Pro-Vice-Chancellor shall from time to time be appointed by the Council from among the members of the Senate.

#### The Court

X. The Court shall be the governing body of the University and shall direct the form, custody, and use of the Common Seal, and shall have power to regulate and

determine all matters concerning the University, and generally shall exercise all the powers and discretions of the University, except as otherwise provided by this Our Charter or by the Statutes.

The Court shall have power by Statute to increase or diminish the number of its members, by increasing or diminishing the number to be nominated or appointed by the persons or bodies possessing the right of nomination or appointment, or by adding representatives of other bodies, or in any other manner.

The Statutes set forth in the Schedule hereto annexed shall be the first Statutes of the University under this Our Charter. The Court may amend, add to, or repeal the Statutes for the time being in force (including those set forth in the Schedule hereto), but no such amendment, addition, or repeal shall be valid or operative until allowed by Us or by a Committee of Our Council.

Ordinances may be made by the Court for the regulation of all matters not required by this Our Charter to be dealt with by Statute.

Provided (1) that it shall not be lawful for the Court, by any Statute or otherwise, to adopt or impose on any person any test whatever of religious belief or profession in order to entitle him to be admitted as a Professor, Teacher, Student, or Member of the University, or to hold office therein, or to graduate thereat, or to enjoy or exercise any privilege thereof.

Provided (2) that any Statute or Ordinance made by the Court be not repugnant to the laws of this Realm or to the general objects of this Our Charter.

Provided (3) that Statutes or Ordinances relating to Degrees, studies, and examinations shall not be adopted without report from the Senate.

Provided (4) that no change shall be made in any Statute or Ordinance altering the status, powers, or constitution of any of the Authorities of the University until such Authority shall have had an opportunity of pronouncing an opinion upon the proposed change.

The Court shall have power to confer Degrees in absentia by a resolution of the Court, but save as aforesaid all Degrees shall be conferred by the Chancellor or in his absence by the Vice-Chancellor or Pro-Vice-Chancellor.

The Court shall have power to deprive any Graduate of the University who shall have been convicted of a crime or offence, or shall, in the opinion of the Court, have been guilty of scandalous conduct, of any Degree or Degrees conferred by the University and of all privileges enjoyed by him as such Graduate aforesaid.

The acts of the Court shall not be invalidated by any vacancy among its Members.

- XI. Every Statute or alteration of a Statute, and every Ordinance or alteration of an Ordinance relating to any of the matters following, that is to say:
  - (a) The titles of Degrees,

(n) The establishment of new Degrees,

- (c) The periods of residence and study in the University or in any affiliated or recognised institution required for Degrees,
- (d) The conditions under which Degrees higher than the Degree of Bachelor in any faculty are to be granted,
- (e) The courses for medical Degrees and the subjects of examinations,

shall before such Statute or alteration of a Statute shall be allowed and before such Ordinance or alteration of an Ordinance shall become operative and have effect be communicated to the Victoria University of Manchester and the University of Liverpool, and if within one month after the receipt of such communication notice of objection thereto shall have been given by the said Universities or either of them the question so arising shall be considered by a Joint Committee of the three Universities, and in default of agreement any of the said Universities may within one month make a representation in regard thereto to Us or to a committee of Our Council, and, in the event last mentioned, such Statute or Ordinance or alteration therein shall not become operative and have effect until allowed by Us or by such Committee.

Statutes of the University shall prescribe and regulate the constitution and appointment of the said Joint Committee and all other matters relating to the said Committee which it may be thought are proper to be so prescribed and regulated.

# The Council

XII. The Council shall be the Executive Body of the University and may exercise and do such of the powers, authorities, and things by this Our Charter granted to or authorised to be done by the Court, as are, or shall from time to time be assigned to the Council by Statute or by the Court, except the election of Members of the Court to be Members of the Council.

The Court shall have power by Statute to increase or diminish the number of the Council, by increasing or diminishing the number to be nominated, elected, or appointed by the persons or bodies possessing the right of nomination or appointment, or by adding representatives of other bodies, or in any other manner.

The Council shall have power to draft Statutes and Ordinances as and when they see fit, and to submit the same to the Court for consideration and enactment.

The acts of the Council shall not be invalidated by reason of any vacancy among its members.

#### The Senate

XIII. The constitution of the Senate shall be determined by Statute.

The Senate shall, subject to the Statutes and Ordinances of the University, and subject also to review by the Court, have the control and general regulation of the instruction and education within the University and shall have power to discuss and pronounce an opinion on any matter whatsoever relating to the University and such other powers and duties as may be conferred upon it by Statute or Ordinance.

#### **Faculties**

XIV. The University shall include the Faculties of Arts, Science, Medicine, and Technology, and such other Faculties

(whether formed by the sub-division of an existing faculty or by the creation of a new faculty or otherwise) as may from time to time be constituted by Statute.

The constitution and powers of the several Faculties shall be determined by Statute.

Such Boards of Faculties shall be appointed by the Council as the Council may from time to time determine; the members of each Board (the numbers of whom shall be in the discretion of the Council) shall be appointed by the Council from among members of one or more Faculties, or from among the External Examiners of the University.

#### Convocation

XV. The Convocation shall consist of the Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Members of the Senate, the Lecturers, and the registered Graduates of the University.

The Court shall have power to fix the conditions of registration and to prescribe the annual or other fees, or a composition therefor which shall be necessary for registration.

The Chancellor, if present, shall preside at the Meetings of Convocation.

# Powers of Convocation

XVI. Convocation shall have the following powers:

To elect its own Chairman, who shall, in the absence of the Chancellor, preside at its Meetings.

To elect representatives as Members of the Court and Council.

To discuss and pronounce an opinion on any matter whatsoever relating to the University, including any matters referred to them by the Court or the Council.

To prescribe the mode of conducting the proceedings of Convocation and of registering the same, and of reporting the same to the Court, Council, or Senate, or any of them.

To enter into communication directly with the Court, Council, or Senate on any matter affecting the University.

# Regulations as to Procedure

XVII. The Court, the Council, the Senate, the Faculties, the Boards of Faculties, and Convocation respectively may from time to time make regulations for governing their respective proceedings, subject to this Our Charter and to the Statutes and Ordinances of the University.

### The Treasurer

XVIII. Our trusty and well-beloved Sir John Barran, Baronet, Treasurer of the Yorkshire College, shall be the first Treasurer of the University, and shall hold his office for one year. Subsequent appointments to the said office shall be made annually by the Court.

# Members of the University

XIX. The Members of the University shall be the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Treasurer, the Members of the University Court, the Professors, Emeritus Professors, Assistant Professors, Readers, Lecturers and Demonstrators, and such other Teachers of the University as the Court may determine, the Members of the Faculties, the holders of such other University offices as the Council may from time to time determine, the Wardens or other chief officers of Halls of Residence licensed by the University, Fellows, Graduates, and Undergraduates of the University.

The Undergraduates of the University shall be such persons attending lectures, or receiving instruction in the University as shall have matriculated under the Statutes.

# Advisory Committees

XX. The Council may from time to time appoint Advisory Committees, consisting of members of the University, and also if the Council shall think fit, of persons who are not members of the University, and may delegate to such Committees such duties as it thinks fit as regards financial, administrative, or other matters affecting the University or any particular Faculty or Department, or the management or supervision of any buildings or property of the University.

#### Examiners and Examinations

XXI. All examinations held by the University shall be conducted in such manner as the Statutes and Ordinances shall prescribe, provided that at least one external and independent examiner shall be appointed by the Council for each subject or group of subjects forming part of the course of studies required for University degrees, but this proviso shall not apply to examinations for admission or entrance to the University.

Provided that in case of a vacancy occurring in or during any examination or of other emergency the Vice-Chancellor shall have power to appoint a substitute for that examination.

## General Provisions

- XXII. All the Degrees and courses of study of the University shall be open to women, subject to such conditions and regulations as the Court may prescribe, and women shall be eligible for any office in the University and for membership of any of its constituent bodies, and in the present Charter words implying the male sex shall be held to include the female, unless the context clearly shows the meaning to be otherwise.
- XXIII. The University may from time to time found and endow Fellowships, Scholarships, Exhibitions, and other Prizes for which funds or property may, by bequest, donation, grant, or otherwise be provided, and may make regulations respecting the same and the tenure thereof, but, except as aforesaid, and except by way of prize, reward, special grant, or remuneration for services rendered or to be rendered, in the past, present, or future respectively, the University shall not make any gift, division or bonus in money unto or between any of its members.
- XXIV. In addition to the buildings, lands, and premises of the University for the time being used and occupied for the immediate purposes thereof, the University shall have power to hold lands, tenements, and hereditaments of an annual value not exceeding in the aggregate, at the time or respective times of the acquisition of the same, the sum of £50,000.

- XXV. The University may demand and receive such fees as the Court may from time to time appoint.
- XXVI. The Court may from time to time alter, amend, or add to these presents by a Special Resolution in that behalf, and such alteration, amendment or addition shall, when allowed by Us, our Heirs, or Successors, or by any Committee of our Most Honourable Privy Council, or other wise as We or They shall think fit, become effectual so that these presents shall thenceforward continue and operate as though they had been originally granted and made as so altered, amended, or added to. This Article shall apply to this Charter as altered, amended, or added to in any manner aforesaid.
- XXVII. A Special Resolution is a Resolution passed at one meeting of the Court and confirmed at a subsequent meeting, held not less than one calendar month, nor more than three calendar months after the former, provided that the Resolution be passed at each meeting by a majority of not less than three-fourths of the Members of the Court present and voting thereon.
- XXVIII. In this Our Charter "Statutes" means the Statutes set forth in the Schedule hereto and any Statutes altering, amending, adding to, or repealing the same or any of them which may hereafter be made and may be allowed by Us in Council, or by a Committee of Our Council.
- "Ordinances" means Acts of the Court under the powers conferred by this Our Charter to which Our further sanction is not hereby or by Statute required.
- "Regulations," except when otherwise required by the context, means Regulations made pursuant to this Our Charter or the Statutes.
- XXIX. Our Royal Will and pleasure is that this Our Charter shall always be construed and adjudged in the most favourable and beneficial sense for the best advantage of the University, and the promotion of the objects of this Our Charter as well in all our Courts as elsewhere notwithstanding any non recital, mis-recital, uncertainty or imperfection herein.

#### THE SCHEDULE

#### STATUTES

I.

# The University Court

(a)

The University Court (hereinafter called the Court) shall consist of the following persons, viz.:

- 1. Ex-officio members, The Chancellor, the Pro-Chancellor, the Vice-Chancellor, and the Treasurer.
- 2 All present members of the Council of the Yorkshire College; all future members of the University Council, during their tenure of office; all present Perpetual and Life Governors of the College; and all future Donors of £1,000 to the University. If a donation of £1,000 be made by a company, society, or partnership firm, one member thereof may be nominated by the Donors as a member of the Court.
  - Six representatives of the Clothworkers' Company of London.
  - One representative of the Skinners' Company of London.
  - One representative of the Drapers' Company of London.
  - One representative of the Trustees of William Akroyd's Foundation.
  - One representative of the West Yorkshire Coal Owners' Association.
  - One rep esentative of the Yorkshire Board of Legal Studies.
- 3. Representatives of Public Authorities, viz.:
  - Six from the County Council of the West Riding of Yorkshire.
  - Two from the County Council of the North Riding of Yorkshire.
  - Two from the County Council of the East-Riding of Yorkshire.

Four from the Council of the County Borough of Leeds.

Two from the Council of the County Borough of Bradford.

One from the Council of the County Borough of York.

One from the Council of the County Borough of Hull.

One from the Council of the County Borough of Halifax.

One from the Council of the County Borough of Huddersfield.

One from the Council of the County Borough of Middlesbrough.

One from the Council of each of such other County Boroughs to be created in future as may be approved by the Court.

4. Representatives of the University:

Ten from the Faculties.

Representatives (not exceeding five in all) of the Convocation, viz:—one representative for every hundred members up to 500.

5. Representatives of other Institutions, viz.:

Representatives of such Affiliated Institutions as the Court may determine, and

One representative of the Victoria University of Manchester.

One representative of the University of Liverpool.

One representative of such other English University as the Court may determine.

6. Representatives of Schools:

Eight representatives of the Head Masters and Mistresses of Secondary Schools in Yorkshire, such representatives to be appointed by the Court.

7. Other Governors:

Three persons appointed by the Crown.

Ten persons elected by co-optation by the Court.

Except as otherwise by the Charter provided, and subject to the Statutes of the University, the Court may determine all matters relating to the nomination, appointment, and election of members of the Court and Council, and their respective periods or terms of office, and all other matters relating to the constitution of the Court and Council.

(b)

The Court shall have power to delegate its functions to the Council except as otherwise provided, and to delegate to the Senate the power to award Degrees other than adeundem Degrees, Degrees conferred on persons who hold office in the University, and Honorary Degrees.

The periods during which members of the Court respectively shall hold office shall be as follows:

The Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Treasurer, and all future members of the University Council shall hold office during the time they occupy the positions named respectively.

All present members of the Council of the Yorkshire College, and all present Perpetual and Life Governors of the Yorkshire College, and all future donors of £1,000 to the University, and the persons nominated by the donors in the case of donations of £1,000 made by a company, society, or partnership firm, shall hold office for their respective lives, or until resignation.

All other members mentioned in clause (a) 2 above, and all members mentioned in clause (a) 3 above, shall hold office for one year from the date of appointment. Members mentioned in clause (a) 4 shall hold office for two years from the respective dates of appointment, and five of such members, to be selected by lot or otherwise as the court shall determine, shall retire in each year. Provided that if a representative of a Faculty ceases to be a member of that Faculty he shall cease to be a member of the Court. Members mentioned in clause (a) 5 and 6, shall hold office for two years from the respective dates of appointment. Members mentioned in clause (a) 7 shall hold office for five years from the

respective dates of appointment, but of the members appointed by co-optation two, to be selected by lot or otherwise as the Court shall determine, shall retire each year.

All retiring members shall be eligible for re-appointment or re-election.

Appointees or representatives need not be members of the bodies appointing.

Any member of the Court may resign such membership at any time by letter addressed to the Registrar of the University.

Any casual vacancy occurring by resignation, incapacity, or death among the appointed or representative or co-opted members shall be filled up as soon as convenient by the person or body which appointed or co-opted the member whose place has become vacant. If such member was a member for a term of years the person appointed to supply his place shall be a member of the Court for the remainder of that term.

Fifteen members of the Court shall form a quorum, and, until the above-mentioned representative members have been appointed, the other members shall form the Court.

#### II.

# The University Council

(a) The University Council (hereinafter called the Council) shall consist of the following persons, namely:—

The Chancellor, the Pro-Chancellor, the Vice-Chancellor, and the Treasurer.

Two representatives of the West Riding County Council. One representative of the North Riding County Council. One representative of the East Riding County Council.

Two representatives of the County Borough of Leeds.

One representative of the County Borough of Bradford.

One representative of the Council of the County Borough of York.

- One representative of the Council of the County Borough of Hull.
- One representative of the Council of the County Borough of Halifax.
- One representative of the Council of the County Borough of Huddersfield.
- One representative of the Council of the County Borough of Middlesbrough.
- Two representatives of the Clothworkers' Company of London.
- Five representatives to be elected by the Faculties of the University.
- One member to be elected by Convocation.
- One member to be nominated by the Crown.
- Twelve members to be elected by the Court. Provided, nevertheless, that at first such of the present members of the Council of the Yorkshire College as have been elected thereto by the Board of Governors of the College shall take the place of the said twelve members; and of such members of the Council of the Yorkshire College four, to be selected by lot or otherwise as the Council may determine, shall retire every three years until the number of such members has been reduced to twelve or less; and on the number of such members being reduced to less than twelve the Court shall have power to appoint any other person or persons to make up such number to twelve. So soon as the number of such members shall have been reduced to twelve or less, the members of the Council of the Yorkshire College who at that time remain members of the Council, together with such appointee or appointees of the Court as aforesaid, shall hold office for the period and be subject to the provisions as to retirement hereinafter mentioned, as if all such members and appointees as aforesaid had been elected members of the Council by the Court on the day when such number as aforesaid was reduced to twelve or less.

The members of the Teaching Staff who are members of the Council, however elected (including the Vice-Chancellor), shall not exceed one fifth of the whole Council.

(b) The periods during which the members of the Council respectively shall hold office shall be as follows:

The Chancellor, the Pro-Chancellor, the Vice-Chancellor and the Treasurer shall hold office for the time during which they occupy the positions named respectively.

All other members of the Council shall hold office for one year from the date of appointment, except as otherwise hereinbefore provided and except members elected by the Court, who shall hold office for three years (four, to be selected by lot or otherwise as the Council shall determine, retiring each year), and except the person appointed by the Crown, who shall hold office for five years.

All retiring members shall be eligible for re-appointment or re-election.

Appointees or representatives need not be members of the bodies appointing.

Any member of the Council may resign such membership at any time by letter addressed to the Registrar of the University.

Any casual vacancy occurring by resignation, incapacity, or death among the appointed or representative members shall be filled up as soon as convenient by the person or body which appointed the member whose place has become vacant. If such member was a member for a term of years the person appointed to supply his place shall be a member of the Council for the remainder of that term.

Seven members of the Council shall form a quorum and until the above named representative members have been elected, the other members shall form the Council.

#### III.

# Powers of the Council

Subject to the provisions made in the Charter and Statutes, the Council shall have the following powers:

To nominate the Pro-Chancellor and the Vice-Chancellor,

To elect Professors of the University, and either to elect or to delegate to the Senate the election of any academic officers of the University other than Professors.

To elect a Registrar and other officers of the University for such periods and under such conditions as may be determined by the Council.

To institute Professorships, Assistant Professorships, Readerships, Lectureships, or other teaching offices, after giving the Senate the opportunity of reporting thereon.

To abolish or hold in abeyance, after giving the Senate the opportunity of reporting thereon, any Professorship, Readership, or other academic office in the University.

To draft Statutes and Ordinances as and when it sees fit and submit the same to the Court. Provided that any Statute or Ordinance relating to courses of study shall not be adopted without giving the Senate the opportunity of reporting thereon.

To make regulations for any purposes for which regulations are or may be authorised to be made.

To govern, manage, and regulate the finances, accounts, investments, property, business, and all affairs whatsoever of the University, and for that purpose to appoint Bankers, Deputy-Treasurers, and any other officers or agents whom it may seem expedient to appoint.

To invest any moneys belonging to the University, including any unapplied income in such stocks, funds, fully paid shares or securities as the Council shall from time to time think at, whether authorised by the general law for the investment of trust moneys or

not, and whether within the United Kingdom of Great Britain and Ireland or not or in the purchase of freehold, copyhold, or leasehold hereditaments in the United Kingdom, including rent charges, or chief rents, with the like power of varying such investments from time to time by sale and re-investment or otherwise.

To sell, buy, exchange, lease, and accept leases of real and personal property on behalf of the University.

To provide the buildings, premises, furniture, and apparatus and other means needed for carrying on the work of the University.

To enter into, vary, carry out, and cancel contracts on behalf of the University. Any contract entered into on behalf of the University may be made in any manner authorised by law for the making of contracts by or on behalf of Companies incorporated under the Companies' Acts, 1862 and 1867.

#### IV.

# Powers of the Vice-Chancellor

The Vice-Chancellor shall have the sole power of suspending or dismissing any offending student, subject to the right of appeal to the Visitor. He shall exercise general supervision over the educational arrangements of the University, regulate the admission of students, and maintain the discipline of the University, for which he shall be responsible to the Council.

# V.

# The Senate

The Senate of the University shall consist of the Vice-Chancellor and the Professors of the University, and of such other members of the Boards of Faculties hereinafter mentioned as the Court may, after report from the Senate, appoint, provided that the number of such other members appointed shall not exceed three, and that they shall hold office for such term only as the Court shall determine.

The Professors of the University within the meaning of the Charter shall include those persons who shall be appointed by the Council as such, and also the Professors

of the Yorkshire College at the date of the Charter, who shall hold their Professorships upon the same conditions as those upon which they held them at the date of the Charter, until such conditions shall be modified or altered by the Council.

The Senate shall have the following powers:

To make and submit to the Council, after report from the Board or Boards of Faculties concerned, all regulations for giving effect to the Statutes and Ordinances of the University relating to courses of study.

To appoint Internal Examiners after report from the Board or Boards of Faculties concerned.

To recommend External Examiners for appointment by the Council after report from the Board or Boards of Faculties concerned.

To report to the Council, after report from the Board or Boards of Faculties concerned, on all Ordinances relating to courses of study.

To report to the Council on Statutes or Ordinances or proposed changes of Statutes or Ordinances.

To report on any matter referred to or delegated to them by the Court or the Council.

To discuss and declare an opinion on any matter whatsoever relating to the University.

To appoint on delegation of the Council, Readers, Lecturers, and other academic officers of the University not being Professors.

To formulate and modify or revise, subject to the control of the Council, schemes for the organisation of Faculties of Arts, Science, Medicine, Technology, and any other Faculties of the University, and to assign to such Faculties their respective subjects; also to report to the Council as to the expediency of the establishment at any time of other Faculties, or as to the expediency of the abolition, combination, or subdivision of any Faculties.

To fix, subject to any conditions made by the Founders which are accepted by the Court, the times

and mode and conditions of competition for Fellowships, Scholarships, and other Prizes, and to award the same.

To do such other acts and things as the Court shall authorise.

No new Degree shall be established or other distinction of Honour or Merit adopted until the Senate has had an opportunity of reporting thereon.

# VI.

#### Faculties

Each of the Faculties shall respectively consist of:-

- 1. The Professors assigned thereto by the Council.
- 2. Such Lecturers, Assistant Lecturers, and other teachers of the University as may be appointed to the Faculty by the Council on the recommendation of the Senate.
- 3. Such other persons as may be appointed by the Council of the University on the recommendation of the Senate.

Each of the Faculties shall have the power of electing a representative or representatives on the Court and Council of the University, but in the event of the number of Faculties being so increased that the members of the staff elected by them would exceed the proportion limited as hereinbefore expressed, the Council shall decide by what Faculties or combinations of Faculties the election shall be made.

Each Faculty shall have the power of presenting recommendations and reports to the Senate upon all matters connected with the subjects of study embraced by the Faculty.

The Faculty of Arts shall, until otherwise provided by Statute, include Economics and Law.

The Faculty of Technology shall, until otherwise provided by Statute, include Agriculture, Dyeing, Engineering, Leather Industries, Mining, and Textile Industries.

The Vice-Chancellor shall be a member of each of the several Faculties and Boards of Faculties.

There shall be a Dean of each Faculty elected by that Faculty, or otherwise as the Council shall direct. He shall preside at the meetings of the Faculty and hold office during such period and with such powers as shall be determined by Statute or Ordinance, and shall be eligible for re-election.

#### VII.

# Powers of the Boards of Faculties

The Boards of Faculties respectively shall have the powers following:—

To regulate, subject to the control of the Senate, the teaching and study of the subjects assigned to the Board in question.

To make recommendations as to the appointment of Examiners.

To report to the Senate on Ordinances and Regulations dealing with courses of study for degrees and other distinctions, and on any questions relating to the work of the respective Faculties.

To deal with any matter referred or delegated to them by the Senate.

#### VIII.

### Convocation

A Register shall be kept containing the names of all persons who are members of Convocation according to the provision made by the Charter.

The Register shall be conclusive evidence that any person whose name appears therein at the time of claiming to vote in Convocation is entitled to vote, and that any person whose name does not appear therein is not so entitled.

A meeting of Convocation shall be summoned at least once in every year and at such other times as Convocation may by its by-laws determine.

A meeting of Convocation may be called by the direction of the Chairman, and hall also be called on the requisition in writing of at least twenty members.

#### IX.

#### Auditor

The Court shall annually appoint an Auditor, who shall be a member of the Institute of Chartered Accountants of England and Wales, or of the Incorporated Society of Accountants and Auditors, in the active practice of his profession, who shall receive such remuneration as may from time to time be determined by the Court.

Acceptance of office by an Auditor shall be deemed to carry with it an undertaking by the Auditor to the University that every certificate given by him, or passing of accounts by him, implies that he has satisfied himself by full and careful investigation (made by himself or agents, for whom he undertakes to be responsible) by every reasonable means within his power, and after the exercise of due professional skill, that the statements in the certificate are true and accurate, and that any accounts certified or passed are complete, true, and accurate.

#### X.

Committee for considering objections by the Universities at Manchester and Liverpool

The Joint Committee to be constituted pursuant to Clause XI of the Charter for considering objections made by the Victoria University of Manchester and the University of Liverpool to proposed Statutes and Ordinances, shall consist of nine members, three to be appointed by each University.

The Joint Committee shall be convened by the Registrar of the Victoria University of Manchester.

#### XI.

Committee for considering objections to proposed Statutes and Ordinances of the University of Sheffield

Any Committee to be constituted for considering objections Additional made by any of the Universities in Manchester, Liverpool and Statute adopted by Leeds to proposed Statutes and Ordinances of the University the Court on of Sheffield shall consist of twelve members, three to be and allowed appointed by each of the said Universities.

Such Committee shall be convened by the Registrar of the in Council

Victoria University of Manchester.

by His

42 Statutes

#### XII.

Regulation and conduct of the Matriculation examination

As amended by the Court, May 19, 1905 and allowed by His Majesty in Council, July 11, 1905. The conditions and subjects of the Matriculation examination, which constitutes the entrance to the Degree courses of the University, together with the exemptions and variations from it, shall be regulated by a Joint Board as constituted in the following clauses of this section.

The Joint Board shall consist of eighteen members, five to be annually elected by each of the Universities in Manchester, Liverpool, and Leeds, and, unless by agreement between all the four Universities it shall be otherwise determined, three by the University in Sheffield, with power to co-opt persons of educational experience to the number of three.

When any change in the regulations regarding the Matriculation examination is carried in the Joint Board by a majority consisting of less than two-thirds of the members who are present, the question at issue shall be referred to each of the four Universities, which shall each then nominate two additional members on the Board for the purpose. The decision of the Board so constituted shall be final.

The Board shall send annual reports to each University.

The regulations of the Board regarding the Matriculation examination shall not affect the power of each University to admit students to such classes and courses as it may think fit.

The four Universities shall contribute to the expenses of the Joint Board in such proportions as may be hereafter determined.

Provided that this Statute shall continue and be in force for seven years from the date of its approval by His Majesty in Council.

#### XIII.

# Periods of Study before Graduation

The period of study necessary to qualify any student for graduation shall not be less than three years, all of which shall be subsequent to the date at which the student passes the Matriculation examination.

Statutes 43

This Clause shall come into operation not later than October 1st, 1906.

In the case of the Yorkshire College, and in the event of any other College or Institution, or any branch or department thereof, becoming affiliated to the University within six months from the date of the Charter, the University may accept attendance which commenced on or subsequent to the First day of October, 1903, at courses of study in the Yorkshire College or in such other College or Institution in place of attendance at courses of study in the University for the same period.

#### XIV.

## **Definitions**

In these Statutes—

- "Statutes" means the Statutes of the University.
- "Ordinances" means Ordinances made pursuant to the Charter or Statutes.
- "Regulations" means Regulations made pursuant to the Charter or Statutes.

In witness whereof We have caused these Our Letters to be made Patent.

Witness Ourself at Westminster the twenty-fifth of April in the Fourth Year of Our Reign.

By Warrant under the King's Sign Manual.

MUIR MACKENZIE.



## AN ACT

To merge the Yorkshire College in the University of Leeds and to transfer all the property and liabilities of the Yorkshire College to the University of Leeds and for other purposes.

(Royal Assent, 24th June 1904.)

Preamble WHEREAS the Yorkshire College was in the year one thousand eight hundred and seventy-eight constituted and incorporated under the Companies Acts 1862 and 1867 as an Association not for profit with the object of founding endowing and maintaining in the county of York a College or Colleges and by means thereof and otherwise of promoting the education of persons of both sexes and in particular of providing instruction in such sciences and arts as are applicable or ancillary to the manufacturing mining engineering and agricultural industries of the county of York and in ancient and modern languages history and literature medicine surgery law logic moral philosophy and other branches of education and with such other subordinate objects as are in the Memorandum of Association of the said College mentioned:

> And whereas by Royal Charter dated the twentieth day of April one thousand eight hundred and eighty the Victoria University was constituted and founded having its seat in the city of Manchester with power to confer degrees and other distinctions except in medicine or surgery unless and until authority in that behalf should be given by further Charter or by Act of Parliament which authority was given by a supplemental Charter dated the twentieth day of March one thousand eight hundred and eighty-three:

And whereas in the year one thousand eight hundred and eighty-seven the Yorkshire College was admitted as a College in the Victoria University:

And whereas by Royal Charter dated the fifteenth day of July one thousand nine hundred and three it is provided that the Victoria University shall henceforth be called and known as the Victoria University of Manchester and (among other things) that on the grant of a Charter establishing a university having its seat in Leeds or elsewhere in Yorkshire the Yorkshire College shall cease to be a College of the Victoria University of Manchester:

And whereas on the Petition of the Yorkshire College a Charter was on the twenty-fifth day of April one thousand nine hundred and four granted by His Majesty constituting in the city of Leeds a university by the name and style of the University of Leeds with faculties of Arts Science Medicine and Technology and such other faculties as may from time to time be constituted by the statutes of the University and with power to grant degrees and to do all acts and things which may be requisite in order to further the objects of the University as a teaching and examining body and to cultivate and promote art science and learning:

And whereas the Yorkshire College has consequently ceased to be a College in the Victoria University of Manchester and the governing body of the Yorkshire College are desirous and it is expedient that the College should be merged in the University of Leeds and that all its property and liabilities should be transferred to and vested in the lastnamed University:

And whereas it is expedient to empower the University of Leads to hold examinations under Section 3 of the Medical Act 1886 and to elect a representative on the General Council mentioned in Section 7 of the same Act:

And whereas the objects of this Act cannot be attained without the authority of Parliament:

# MAY IT THEREFORE PLEASE YOUR MAJESTY

That it may be enacted and be it enacted by the King's Most Excellent Majesty by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled and by the authority of the same as follows (that is to say):

- This Act may be cited as the "University of Leeds short title. Act, 1904."
- 2. On the passing of this Act the Yorkshire College Dissolution shall be by virtue of this Act dissolved and cease to exist and College and all property real and personal of every description (including transfer of things in action) and all rights and privileges of the York-University of shire College which immediately before that date belonged Leeds.

to or were vested in that College shall be by virtue of this Act without any conveyance or other instrument transferred to and vested in the University of Leeds for all the estate and interest therein of the Yorkshire College and shall be applied to the objects and purposes for which the University of Leeds is incorporated.

Transfer of liabilities.

3. On the passing of this Act all debts and liabilities of the Yorkshire College shall by virtue of this Act be transferred and attached to the University of Leeds and shall thereafter be discharged and satisfied by that University.

Saving for agreements deeds actions &c.

4. All agreements awards contracts deeds and other instruments and all actions and proceedings and causes of action or proceedings which immediately before the passing of this Act were existing or pending in favour of or against the Yorkshire College shall continue and may be carried into effect enforced and prosecuted by or in favour of or against the University of Leeds to the same extent and in like manner as if the University of Leeds instead of the Yorkshire College had been party to or interested in the same respectively.

Adjustment of property and liabilities &c.

- 5. (1) The Council of the Victoria University of Manchester the Council of the Owens College Manchester and the Council of the University of Liverpool or any of them may by agreement with the Council of the University of Leeds adjust and settle all questions arising with respect to any endowments property powers privileges authorities debts liabilities obligations or expenses in which the parties to the agreement are interested and also with respect to any examinations degrees and other University and College matters.
- (2) An agreement under this section may provide for the transfer retention division apportionment or commutation of any endowments property debts liabilities or obligations and for a payment being made by any party to the other or others in respect of any such transfer retention division apportionment or commutation or in respect of the salary or remuneration of any officer or person and generally may make as between the parties to the agreement any provisions necessary or proper for carrying into effect the purposes of this Act.

- (3) In default of agreement on any such question as aforesaid or so far as such agreement does not extend the question shall be referred to a single arbitrator to be nominated by the Lord President of His Majesty's Council on the application of any party and his award may provide for any matter for which an agreement might have provided. And subject as aforesaid the provisions of the Arbitration Act 1889 shall apply.
- 6. All professors and other members of and persons Saving for attached to or associated with the teaching staff of the existing officers of Yorkshire College and all salaried or paid officers and Yorkshire servants of the Yorkshire College shall hold as nearly as College. practicable the same offices and places in the University of Leeds as they held in the said College immediately before the passing of this Act and upon the same terms and conditions unless and until the Council of the University shall otherwise decide.

7. Any power or right of the Yorkshire College or of the Transfer of Council Senate or other members of that College as such to nominate appoint or nominate a member of the governing body of any members of certain educational charitable or other institution shall on the passing governing of this Act be transferred to and may be exercised by the bodies. Council of the University of Leeds.

8. The University of Leeds is hereby empowered to hold Power of qualifying examinations in medicine surgery and midwifery Leeds to hold for the purpose of registration under the Medical Acts as if examinations the University had been a University in the United Kingdom 50 Vict. c. 48. legally qualified at the passing of the Medical Act 1886 to grant diplomas in medicine and surgery and the provisions of Part I of that Act shall be read and have effect accordingly.

9. The Council of the University of Leeds shall be Power of University of entitled to choose one representative to be a member of the Leeds to General Council constituted by the Medical Acts and choose representative Section 7 of the Medical Act 1886 shall be read and have on General Medical effect as if the University of Leeds had been expressly Council. included therein.

19. Section 7 of the Mortmain and Charitable Uses Application of Act 1888 shall be read and have effect as if the words "and Mortmain &c. the University of Leeds" were therein inserted after the Act 1888 (51 and 52 Vict. words "Victoria University."

c. 42).

Construction of bequests in favour of Yorkshire College.

11. Any will deed or other document whether made or executed before or after the passing of this Act which contains any bequest gift or trust in favour of the Yorkshire College shall on and after the passing of this Act be read and have effect as if the University of Leeds were therein named instead of the Yorkshire College.

As to the Charitable Trusts Acts.

12. The Charitable Trusts Acts 1853 to 1894 shall not extend to the University of Leeds or to any college or hall therein.

Copy of Act to be registered.

13. The Council of the University of Leeds shall deliver to the Registrar of Joint Stock Companies a printed copy of this Act and he shall retain and register the same and if such copy is not so delivered within three months from the passing of this Act the University of Leeds shall incur a penalty not exceeding two pounds for every day after the expiration of those three months during which the default continues and any member of the said Council who knowingly and wilfully authorises such default shall incur the like penalty. Every penalty under this section shall be recoverable summarily.

There shall be paid to the Registrar by the University of Leeds on such copy being registered the like fee as is for the time being payable under the Companies Act 1862 on registration of any document other than a Memorandum of Association.

Costs of Act.

14. The costs charges and expenses of and incidental to preparing and obtaining this Act shall be defrayed by the University of Leeds out of income or of the capital of the property by this Act transferred to the University or if the Council of the University think, fit, out of money to be raised by sale or mortgage of some part of the said property.

# An Act to extend the privileges of the Graduates of the University of Leeds.

(Royal Assent, 15th August, 1904.)

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Con mons, in this present Parliament assembled, and by the authority of the same, as follows:—

- r. Wherever any office is or shall be open to graduates of the Universities of Oxford, Cambridge, and London, and of the Victoria University of Manchester, or wherever any privilege or exemption has been or shall be given by any Act university of Parliament or regulation of any public authority to Univergraduates of the Universities of Oxford, Cambridge, and London, and the Victoria University of Manchester, graduates of the University of Leeds having the degree which would be a qualification if it had been granted by the University of Oxford, Cambridge, or London, or the Victoria University of Manchester, may become candidates for and may hold any such office and shall be entitled to all such privileges as fully as graduates of any of the last-mentioned universities.
- 2. This Act may be cited as the Leeds University Act, Short 1904.

## **ORDINANCES**

made by the Court in accordance with the provisions of Clauses X and XI of the Charter

#### I. AFFILIATED COLLEGES AND INSTITUTIONS

(Ordained, May 18, 1904; amended, March 2, 1906.)

- r. Colleges and Institutions, or parts thereof, may be admitted to affiliation after report by the Senate. The Senate, before recommending the affiliation of any such College or Institution, shall satisfy itself:
  - (a) That the College or Institution has attained a satisfactory standard of educational efficiency for the purposes for which affiliation is sought, and is established on a permanent basis.

(b) That the majority of regular students in such College or Institution are of the age of sixteen years.

- 2. In the case of any affiliated College or Institution, or of any part of such College or Institution recognised for the purposes of this clause, students who have attained the age of seventeen years, and have passed the Matriculation examination of the University, or are exempt therefrom, shall be allowed to attend at any such College or Institution a part or the whole of a course of study, approved by the Senate of the University as exempting from such courses of study in the University as the Council may approve, provided that in no case shall the University confer a degree upon any person who has not attended in the University during two years at least the courses of study which have been recognised for such degree.
- 3. The Council shall, after a report from the Senate, determine the privileges to which the students of any such affinated College or Institution shall be admitted.

4. Any College or Institution desiring to avail itself of the foregoing Ordinance shall

- (a) Make provision for the representation of the University on the body which determines the annual plan of study, in so far as it concerns the courses submitted for the approval of the University;
  - (b) Submit for the approval of the Senate of the University day courses of study, whose duration, scope, and standard shall be equivalent to the corresponding courses of the University.

- 5. The University shall inspect from time to time the buildings and equipment for teaching provided in any such College or Institution, and shall satisfy itself as to the qualifications of any teacher therein appointed to conduct the courses offered in place of University courses.
- 6. The Council, after a report from the Senate, shall be entitled at any time to withdraw any privileges which may have been granted to any College or Institution under these Ordinances, and to remove the said College or Institution from affiliation.

## Affiliated Colleges

THE COLLEGE OF THE RESURRECTION, MIRFIELD (May 18, 1904). By resolution of the Council the students of this College are exempt from attendance at the University upon the first of the three years of study required for the B.A. Ordinary or Honouis degree.

THE TECHNICAL COLLEGE, HUDDERSFIELD. (March 2, 1906). By resolution of the Council, attendance upon certain classes in this College is recognised as exempting from attendance upon classes in the University in the first year of the courses required for the degrees of B.A., B.Sc. (including Engineering), and M.B. and Ch.B.

#### II. DEGREES IN ARTS

(Ordained, July 3, 1905) (Amended, May 30, 1906 and February 6th, 1907)

1. The degrees in Arts shall be:

Bachelor of Arts (B.A.)
Master of Arts (M.A.)
Doctor of Letters (Litt.D.).

## Degree of Bachelor of Arts

- 2. The degree of Bachelor of Arts shall be conferred either as an Ordinary degree or as a degree with Honours.
- 3 All candidates for the degree of Bachelor of Arts shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

## Ordinary Degree of Bachelor of Arts

- 4. The complete course of study for the Ordinary degree of Bachelor of Arts shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.
- 6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
- 7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the separate Examination committee concerned, may determine.
- 8. Candidates who have failed at a Final examination may present at the June examination of the following year those books and periods in which they have already been examined.
- 9. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

#### Intermediate Course and Examination

- 10. Every candidate shall be required, after passing the Matriculation examination, to attend during one academic year approved courses of study in five subjects, and to pass in each of the subjects selected, viz.:
- i, ii. Two languages from the following list: Greek, Latin, French, German, one of which must be Greek or Latin.
  - if. Either (a) English Literature; or (b) History (Ancient or Modern).

- iv. Either (a) Logic; or (b) Mathematics; or (c) one of the following Natural Sciences: Physics, Chemistry, Geology.
- v. English Language or any subject under i, ii, iii, iv not already selected, provided that no candidate may take (a) both Ancient and Modern History, (b) two Natural Sciences.

The examination in each modern language shall include an oral examination.

## Final Course and Examination

- courses of study in three principal subjects and one subsidiary subject, and to pass in each of the subjects selected. The same subject may not be taken both as a principal and as a subsidiary subject. An essay paper shall be set for all candidates at the Final examination.
- 12. The course of study in each principal subject shall extend over two academic years, and the course of study in the subsidiary subject shall extend over one academic year.
- 13. The principal subjects shall be selected from the following list: Greek, Latin, French, German, English Language and Literature, History, Philosophy, Economics, Education, Pure and Applied Mathematics. Every candidate shall be required to take as a principal subject one of the following: Greek, Latin, French, German. The examination in each modern language shall include an oral examination.
- 14. The subsidiary subjects shall be selected from the following list: English Literature, History, Philosophy, Economics, Education, Pure Mathematics, Applied Mathematics. The course of study in a subsidiary subject may be taken either in the first or second year of the Final course.
- of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in June of that year for examination in such subsidiary subject. Part of the examination in Education, to be defined by Regulation, may also be taken at the end of the first year of the Final course.

# Degree of Bachelor of Arts with Honours

- 1. Candidates for the degree of Bachelor of Arts with Honours shall, except as hereinafter stated, be required to furnish certificates of having attended courses of instruction approved by the University and extending over not less than three academical years in one of the Honours Schools of the University hereafter enumerated.
- 2. Every candidate for the degree of Bachelor of Arts with Honours shall be required to present himself for examination at the end of the third or fourth academic year from the time when he has entered upon one of the courses of instruction approved by the University for such degree, unless he shall present a medical certificate of illness satisfactory to the Senate. This examination shall ordinarily be held in June of each year.
- 3. Candidates for the degree of Bachelor of Arts with Honours may present themselves for examination in any of the following Honours Schools on turnishing certificates of having pursued, to the satisfaction of the Senate, the courses required for such Honours Schools in the University, viz.:

Classics

English Language and Literature Modern Languages and Literatures History Philosophy Economic and Political Science.

- 4. Candidates who have passed the Final examination for an Ordinary degree of Bachelor of Arts may, with the sanction of the Senate and on furnishing certificates of having attended, during the academic year following such Final examination for the Ordinary degree, the third year's, or, during the two academic years following such Final examination, the second and third years' courses approved by the University for any one of its Honours Schools, present themselves for examination for the degree of Bachelor of Arts with Honours in such School.
- 5. No candidate for a degree of Bachelor of Arts with Honours shall be admitted more than once to examination in the same Honours School; but students who have passed

the Final examination in any of the Honours Schools may be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University.

Provided that in the said other Honours School selected, candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

- 6. Names of candidates who have passed the examination for the degree of Bachelor of Arts with Honours shall be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.
- 7. Candidates who have not acquitted themselves so as to deserve Honours may be excused the whole or such part of the examinations for the Ordinary degree as the joint Examination committee may determine.

# Degree of Master of Arts

I

1. The degree of Master of Arts may be conferred, on payment of the proper fee, upon registered Bachelors of Arts when of not less than one year's standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Arts who have graduated with Honours may proceed to the degree of Master of Arts on presenting a dissertation satisfactory to the Senate on a subject approved

by the Board of the Faculty of Arts.

3. Bachelors of Arts who have obtained the Ordinary degree shall be required to pass an examination in a subject or group of subjects upon which instruction is given in the Faculty of Arts, and to present a dissertation satisfactory to the Senate on a subject approved by the Board of the

Faculty of Arts, or, if they do not present a dissertation, to pass a more extended examination. Regulations shall determine the subjects and groups of subjects in which the examination will be held. Certificates of attendance on courses of study in the University shall not be required. Bachelors of Arts who have obtained Honours in any school after the Ordinary degree shall be held to have satisfied the requirements of this clause

4. The names of candidates who have passed the examination for the degree of Master of Arts shall be arranged in alphabetical order without distinction of classes.

#### H

Graduates or persons who have passed the Final examination for a degree of other approved Universities shall, if they present evidence satisfactory to the Senate that they are qualified to pursue a course of advanced study or research, be permitted to enter the University and to become candidates for the degree of M.A., without taking the B.A. degree, after not less than two years of such advanced study or research. Such candidates shall be required to give evidence to the Senate at the end of the first year of their period of study that their work has been satisfactory, and at the end of their second year they shall be required to present a dissertation, and to satisfy such further test, if any, as the Senate shall deem expedient.

# Degree of Doctor of Letters

1. The Degree of Doctor of Letters shall be conferred by the University upon registered Masters of Arts of the University who shall be deemed by the Senate, after considering a report from the Board of the Faculty of Arts, to have distinguished themselves by special research or learning.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from the Board of the Faculty of Arts, also require candidates to pass such an examination as it may from time to time determine.

2. A Master of Arts of the University may make application for the Degree of Doctor of Letters in the sixth or any subsequent year from the date of his admission to the Bachelor's degree.

3. Such application shall be made in writing to the Registrar, and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any thesis, whether in print or in manuscript, which the applicant may desire to submit in support of the application.

4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

#### III. DEGREE IN COMMERCE

(Ordained, July 3, 1905.)

- 1. The degree in Commerce shall be that of Bachelor of Commerce (B. Com.).
- 2. All candidates for the degree of Bachelor of Commerce shall be required to have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, and thereafter to have pursued approved courses of study for not less than three academic years.

3. The complete course of study for the degree of Bachelor of Commerce shall be divided into two parts, called respectively the Intermediate course and the Final course.

4. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

5. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

6. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee for the degree of Bachelor of Commerce, may determine.

7. All students shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

#### Intermediate Course and Examination

- 8. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in five subjects, viz.:
  - i. Economics: the outlines of the economic history of England in the Nineteenth Century, and the general elementary principles of Economics
  - ii. The economic geography of the British Empire
  - iii. A modern foreign language (French or German)

iv, v. Two of the following:

A second modern foreign language (French or German, whichever of the two has not been offered under in)

Mathematics

European History from 1763,

and to pass in each of the subjects offered. The examination in each modern foreign language shall include an oral examination.

#### Final Course and Examination

- 9. Every candidate shall be required, except as provided in clause 10, to attend approved courses of study, extending over two years, and to pass an examination in each of the following principal subjects:
  - i. Economics: comprising (a) advanced general Economics (b) a special economic subject
  - ii. A modern foreign language (French or German)
  - iii. A second modern foreign language (French or German, whichever of the two has not been offered under ii)
  - iv. Accountancy.

The examination in each modern foreign language shall include an oral examination. An essay shall also form part of the examination.

10. For the second modern foreign language or for Accountancy candidates 12 ay substitute two of the following, studied each for one year as a subsidiary subject:

- (a) The economic geography of the principal foreign countries
- (b) Commercial Law
- (c) Accountancy (unless Accountancy has already been offered as a principal subject).

Candidates may take the course of study in a subsidiary subject in the first year of the Final course, and present themselves at the end of that year for examination in such subject.

## IV. DEGREES IN LAW

1. The degrees in Law shall be:

Bachelor of Laws (LL.B.) Doctor of Laws (LL.D.)

# Degree of Bachelor of Laws

(Ordained, March 2, 1906.)

- 2. All candidates for the degree of Bachelor of Laws shall be required to have passed the Matriculation examination, except those who may be exempted therefrom, and thereafter to have pursued approved courses of study for not less than three academic years.
- 3. The complete course of study for the degree of Bachelor of Laws shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 4. Every candidate shall be required to pass two examinations, the Intermediate and the Final.
- 5. The Intermediate and Final examinations shall ordinarily be held in June of each year.
- 6 All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study in each of the subjects which they offer at the examination.

#### Intermediate Course and Examination

7. Every candidate shall be required, after passing the Matriculation examination, or after obtaining exemption

therefrom, to attend during one academic year approved courses of study, and to pass in each of the following subjects:

i. Roman Law

ii. Elements of English Law

iii. The Law and Custom of the English Constitution

iv. Any subject included in the course for the Intermediate examination for the Ordinary degree of B A. or B.Com.

Provided that candidates who are already graduates of this or any other University within the United Kingdom shall not be required to attend classes or to be examined in iv.

#### Final Course and Examination

3. Every candidate shall be required to attend during two academic years one or other of the following courses of study, and to pass in each of the subjects of the selected course:

#### Course I.

- i. Roman Law
- ii. Jurisprudence
- iii. Public or Private International Law.

An essay paper shall be set at the Final examination for all candidates taking this course.

## Course II.

- i. Property, Real and Personal (including Conveyancing)
- ii. Equity (including Company Law)
- iii. Common Law (including Criminal Law and Bankruptcy)
- iv. Evidence and Procedure
- v. Jurisprudence.

## Degree of Doctor of Laws

(Ordained February 6, 1907.)

1. The degree of Doctor of Laws shall be conferred by the University upon registered Bachelors of Laws of the University who shall be deemed by the Senate, after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of Faculties, also require candidates to pass such an examination as it may from time to time determine.

- 2. A Bachelor of Laws of the University may make application for the degree of Doctor of Laws in the sixth or any subsequent year from the date of his admission to the Bachelor's degree.
- 3. Such application shall be made in writing to the Registrar, and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any thesis, whether in print or in manuscript, which the applicant may desire to submit in support of the application.
- 4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

#### V. DEGREES IN SCIENCE

(Ordained, July 3, 1905) (Amended, May 30, 1906 and February 6th, 1907)

1. The degrees in Science shall be:-

Bachelor of Science (B.Sc.) Master of Science (M.Sc.) Doctor of Science (D.Sc.).

## Degree of Bachelor of Science

- 2. The degree of Bachelor of Science shall be conferred either as an Ordinary degree or as a degree with Honours.
- 3. All candidates for the degree of Bachelor of Science shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

# Ordinary Degree of Bachelor of Science

- 4. The complete course of study for the Ordinary degree of Bachelor of Science shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.
- 6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
- 7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee concerned, may determine.
- 8. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.
- 9. The proficiency of candidates in laboratory work may be determined by inspection of their laboratory note books and the consideration of terminal or sessional reports from their laboratory teachers. Candidates may also be called upon to undergo a special practical examination at the Intermediate and Final stages of the degree course.

It shall always be in the power of the External Examiner to impose a practical or vivâ voce examination on such occasions as he may think desirable.

### Intermediate Course and Examination

10. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in three subjects (one of which must be Mathematics or Physics) selected from the following:

Mathematics Physics Chemistry Biology<sup>1</sup> Geology,

and to pass in each of the subjects selected.

Candidates who propose to take an Applied Science (see section 15) in the Final course must pass in the subjects of the Intermediate course specified in section 20.

11. Every candidate is further required, at some time during his course, to take an additional subject at the Intermediate standard, selected from the following: Greek, Latin, French, German, English Literature, English Language, Ancient or Modern History, Logic, Economics, Economic Geography, Mathematics, Physics, Chemistry, Biology, Geology. In the case of candidates taking an Applied Science as a principal subject in the Final course (section 20 below), this list is increased by the addition of Applied Mechanics and General Engineering.

12. A descriptive essay relative to the scientific or technical work of the candidates will be set as part of the Intermediate examination, and will be examined by the Examiners in English in co-operation with the Examiners in the scientific department concerned, and in the event of a student failing in this portion of the Intermediate examination, he shall be permitted to take it again at any subsequent Intermediate examination.

#### Final Course and Examination

13. Every candidate will be required to attend approved courses of study either in two principal subjects, or in one principal subject and two subsidiary subjects, provided that the same subject shall not be taken both as a principal and a subsidiary subject. One of the subjects selected must be Mathematics, Physics, Chemistry, or an Applied Science.

In the Final examination there will be included, for translation into English, passages of French and German, relating to the principal subject or subjects of a candidate's degree course, and credit will be given for correct renderings of such passages. In the case of candidates who have passed neither in French nor in German at the Matriculation

<sup>1</sup> Biology is understood to include the Intermediate courses in Zoology and Botany.

examination, and who have passed neither in French nor in German as an additional subject at the Intermediate standard, it shall be obligatory to satisfy the Examiners in the translation of one of the aforesaid passages from either French or German.

14. The course of study in each principal subject shall extend over at least two years beyond the Intermediate standard, and the course of study in a subsidiary subject shall extend over at least one year beyond the Intermediate standard.

## Principal Subjects

15. The principal subjects shall be selected from the following lists:

## Pure Sciences:

Mathematics Physics Chemistry Zoology Botany Physiology Geology.

## Applied Sciences:

Mechanical Engineering Civil Engineering Electrical Engineering Mining Engineering Gas Engineering Fuel and Metallurgy. Agriculture

Applied Chemistry (Colour Chemistry and Dyeing)

Applied Chemistry (Chemistry of Leather Manufacture).

Every candidate taking Physics as a principal subject is required to have passed in Mechanics at the Matriculation examination, or to satis., the Professor of Physics that he possesses an adequate knowledge of the subject.

In the event of Physiology being chosen as a principal subject, the second principal or the two subsidiary subjects shall be chosen from among the following: Physics, Chemistry, Zoology, Botany. In any case, six months' instruction in Human Anatomy will be required.

Every candidate taking an Applied Science as a principal subject is required to pursue one of the courses specified in

section 20.

## Subsidiary Subjects

16. The subsidiary subjects shall be selected from the following list:

Mathematics I (Pure)

Mathematics II (Pure and Applied)

**Physics** 

Chemistry

Zoology

Botany

Physiology

Geology

Human Anatomy

Bacteriology

Education (including the teaching of Elementary Science).

Mathematics I and II cannot be taken together as subsidiary subjects.

17. The following subjects shall rank as subsidiary subjects in connection with courses where Mechanical or Civil or Electrical or Mining Engineering is taken as a principal subject:

Mechanical Engineering Civil Engineering Electrical Engineering

Mining Engineering.

- 18. The course of study in the subsidiary subjects may be taken either in the first or second year of the Final course.
- 19. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in the following

June for examination in such subsidiary subject. When Education is taken as a subsidiary subject, part of the examination may be taken at the end of each of the two years of the Final course. Candidates who fail to satisfy the examiners in such parts of the Final examination as they have taken at the end of the first year of their Final course shall be required to repeat this part of the examination at a subsequent June examination.

# Courses for candidates taking an Applied Science

• 20. Candidates selecting an Applied Science as a principal subject are required to attend courses of study and to present themselves for examination in definite subjects, as specified below:

## Mechanical Engineering:

Intermediate – Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Mechanical Engineering; subsidiary subjects, Mathematics, and either Physics or Civil or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

## Civil Engineering:

Intermediate—Mathematics, Physics and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Civil Engineering; subsidiary subjects, Mathematics, and either Geology or Mechanical or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Geology.

## Electrical Engineering:

Intermediate —Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal st bject, Electrical Engineering; subsidiary subjects, Mathematics, and either Physics

or Mechanical or Civil or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

## Mining Engineering:

Intermediate—Mathematics, Physics, and Chemistry; additional subject at Intermediate standard.

Applied Mechanics.

Final—Principal subject, Mining Engineering; subsidiary subjects, two of the following: Mathematics, Geology, Mechanical, or Electrical Engineering, but candidates shall produce certificates of having satisfactorily attended prescribed courses of study in each of these four subjects.

## Gas Engineering:

Intermediate—Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Gas Engineering; subsidiary subjects, Chemistry and Engineering.

## Fuel and Metallurgy:

Intermediate - Mathematics, Physics, and Chemistry; additional subject at Intermediate standard. Applied Mechanics.

Final—Principal subject, Fuel and Metallurgy; subsidiary subjects. Chemistry and Mechanical Engineering.

## Agriculture:

Intermediate—Physics, and two of the following: Chemistry, Biology, Geology; together with an additional subject at Intermediate standard (see section 11).

Final - Agriculture, as principal subject, together with one of the pure sciences specified under section 15 above as the second principal subject, or two of the pure sciences specified under section 16 as subsidiary subjects.

## Applied Chemistry (Colour Chemistry and Dveing):

Intermediate—Mathematics, Physics, and Chemistry: additional subject at Intermediate standard, General Engineering.

Final—Two principal subjects, viz: Colour Chemistry and Dyeing, and Chemistry.

Candidates presenting Applied Chemistry (Colour Chemistry and Dyeing) may not present this subject until the end of the fourth year of study. Such candidates may take the examination in Chemistry at the end of the third year.

Applied Chemistry (Chemistry of Leather Manufacture):

Intermediate Three of the following: Mathematics, Physics, Chemistry, Biology, and an additional subject at Intermediate standard (see section 11). Final—Two principal subjects, viz: Chemistry of Leather Manufacture, and Chemistry.

# Degree of Bachelor of Science with Honours

1. The degree of Bachelor of Science with Honours will be awarded in the following subjects:

**Mathematics** Physics Chemistry Zoology Botany Physiology Geology Civil Engineering Mechanical Engineering Electrical Engineering Mining Engineering Gas Engineering Fuel and Metallurgy Applied Chemistry (Chemistry of Leather Manufacture) Applied Chemistry (Colour Chemistry and Dyeing) Agriculture.

2. Candidates will be required to present certificates of attendance upon approved courses of study extending over three or four years, a defined under the regulations for each Honours School. Such certificates of attendance shall only

be granted when the candidate has regularly attended to the work of the classes and has acquitted himself satisfactorily at the class examinations.

- 3. Candidates for Honours must present certificates that they have satisfied the Examiners in such subjects as would fulfil the requirements of the Intermediate examination (including the additional subject), but they will be excused the examination in any subject which they will subsequently present at a more advanced standard. They must also attend the recognised classes, and pass in one principal or two subsidiary subjects of the Final examination for the Ordinary degree, provided that such subjects shall not include the subject in which they are presenting themselves for Honouis. It shall not be obligatory to pass simultaneously in the subjects thus prescribed, whether at the Intermediate or at the Ordinary Final standard.
- 4. A special examination in connection with each Honours School will be held at the end of the course of study, ordinarily in June of each year. Candidates who shall present evidence satisfactory to the Senate that they are qualified to enter upon a course of research may receive permission to pursue such a course, and to offer a thesis of their work in place of part or the whole of the Honours examination; but no candidate shall be excused the whole of the Honours examination unless he has satisfied the examiners in the subject of his Honours School as a principal subject for the Ordinary degree, in addition to the one principal subject or two subsidiary subjects mentioned in the previous Section.

Each application for the recognition of research work must be made to the Senate not later than the last day of the October preceding the Honours examination, together with a statement of the intended subject of research; and a summary of the course of work actually pursued must be sent in to the examiners not later than the first day of the May preceding the Honours examination.

Candidates whose thesis does not satisfy the examiners shall not receive the Honours degree, but may be recommended for the Ordinary degree, in accordance with Section 7.

5. In the Final examination there will be included, for translation into English, passages of French and German

relating to the subject in which the candidate is presenting himself for Honours. In the case of candidates who have passed neither in French nor in German at the Matriculation examination, and who have passed neither in French nor in German as an additional subject at the Intermediate standard, it shall be obligatory to satisfy the examiners in the translation of one of the aforesaid passages from either French or German.

- 6. Names of candidates who have passed the examination for the degree of Bachelor with Honours will be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.
- 7. Candidates who have not acquitted themselves so as to deserve Honours, but have reached the standard of the Ordinary degree, may be recommended for that degree.
- 8. Candidates who have passed the examination for the Ordinary degree of Bachelor of Science may (during the succeeding year or the two years immediately succeeding) proceed with the course of study in an Honours School.
- 9. No candidate for a degree of Bachelor of Science with Honours shall be admitted more than once to examination in the same Honours School, except under special conditions approved by the Senate; but the course shall in no case exceed four years, except in cases of illness, when a medical certificate satisfactory to the Senate will be required.
- 10. Students who have passed the Final examination in any of the Honours Schools shall be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University, provided that in the said other Honours School selected candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the Jate of his first entrance upon a prescribed course of study for an Honours School.

11. Candidates who have passed the Second M.B. examination may, with the sanction of the Senate, and on furnishing certificates of having during the academical year following such Second M.B. examination attended the third year's, or during the two academical years following such Second M.B. examination of having attended the second and third year's course approved by the University for one of its Honours Schools in Science, present themselves for examination for a B.Sc. degree with Honours in such school.

# Degree of Master of Science

Ι

1. The degree of Master of Science is conferred, on payment of the proper fee, upon registered Bachelors of Science, when of one year's standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Science who have graduated with Honours are not required to present themselves for any further ex-

amination for the degree of Master of Science.

- 3. Bachelors of Science who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination in *one* of the following subjects: Mathematics, Physics, Chemistry, Zoology, Botany, Physiology, Geology, Mechanical, Civil, Electrical, Mining Engineering, Applied Chemistry (Colour Chemistry and Dyeing), Applied Chemistry (Chemistry of Leather Manufacture), and Agriculture. Certificates of attendance are not required.
- 4. The names of candidates who have passed the further examination for the degree of Master of Science are arranged in alphabetical order without distinction of classes.
- 5. Candidates who have prosecuted research, and who give satisfactory evidence thereof by the presentation of a thesis, may be excused part or the whole of the examination.

#### 11

Graduates or persons who have passed the Final examination for a degree of other approved Universities shall, if they present evidence satisfactory to the Senate that they are qualified to pursue a course of advanced study or research, be permitted to enter the University and to become candidates for the degree of M.Sc., without taking the B.Sc. degree, after not less than two years of such advanced study or research. Such candidates shall be required to give evidence to the Senate at the end of the first year of their period of study that their work has been satisfactory, and at the end of their second year they shall be required to present a dissertation, and to satisfy such further test, if any, as the Senate shall deem expedient.

## Degree of Doctor of Science

1. The degree of Doctor of Science is conferred by the University upon registered Masters of Science of the University who shall be deemed by the Senate, after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of the Faculties, also require candidates to pass such an examination as it may from time to time determine.

- 2. A Master of Science of the University may make application for the degree of Doctor of Science in the sixth or any subsequent year from the date of his admission to the Bachelor's degree.
- 3. Such application shall be made in writing to the Registrar and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any memoir, whether in type or in manuscript, which the applicant may desire to submit in support of the application.
- 4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

## VI. DEGREES IN MEDICINE AND SURGERY

(Ordained, July 3, 1905)
(Amended, May 30, 1906 and February 7, 1907)
The degrees in Medicine and Surgery shall be:
Bachelor of Medicine and Bachelor of Surgery
(M.B. and Ch. B.)
Doctor of Medicine (M.D.)
Master of Surgery (Ch.M.).

# Degrees of Bachelor of Medicine and Bachelor of Surgery

- 1. Candidates for the degree of Bachelor of Medicine and of Surgery are required to present certificates showing that they will have attained the age of twenty-one years on the day of graduation, and that they have attended courses of instruction approved by the University extending over not less than five years, two of such years at least having been passed in the University, at least one year being subsequent to the date of passing the First examination.
- 2. Candidates for the degrees of Bachelor of Medicine and of Surgery are required to satisfy the Examiners in the several subjects of the following examinations, entitled respectively:

The Matriculation examination, or such other examination as may have been recognised by the Joint Matriculation Board of the Universities of Manchester, Liverpool, Leeds and Sheffield in its stead; the First examination; the Second examination; the Final examination.

#### First Examination

3. The first Examination shall consist of two parts:

PART I. Physics Chemistry.

PART H. Biology.

- 4. Candidates, before presenting themselves for the First examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the Matriculation examination.
- 5. Candidates who have passed the Intermediate examination for the degree of Bachelor of Science in Chemistry, Physics, and Biology, will, on payment of the required additional fee, be regarded as having passed the First examination for the degrees of Bachelor of Medicine and Bachelor of Surgery.
- 6. The names of candidates who have satisfied the Examiners in either part of the First examination shall be published in alphabetical order.

#### Second Examination

7. The Second examination shall consist of two parts:

PART I. Anatomy
Physiology.
PART II. Materia Medica
Pharmacy.

- 8. Candidates, before presenting themselves for the Second examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the First examination.
- 9. The names of candidates who have satisfied the Examiners in either part of the Second examination shall be published in alphabetical order.

#### Final Examination

10. The Final examination shall consist of two parts:

Part I. Pathology and Bacteriology Forensic Medicine Public Health.

PART II. Medicine
Surgery
Obstetrics and Gynacology
Pharmacology and Therapeutics.

- 11. Candidates, before presenting themselves for the first part or the second part of the Final examination, are required to have passed the Second examination, and to furnish certificates of having attended courses of instruction, in accordance with the Regulations of the University.
- 12. The names of candidates who have satisfied the Examiners in the first part of the Final examination shall be published in alphabetical order.
- 13. The names of candidates who have satisfied the Examiners in all the subjects of the Final examination, and are recommended for degrees, shall be published as follows:
  - 1. Those awarded First Class Honours
  - 2. Those awarded Second Class Honours
  - 3. Those who have satisfied the Examiners.

The names shall be in alphabetical order in each case.

# Degree of Doctor of Medicine

1. No candidate shall be admitted to the degree of Doctor of Medicine unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for

those degrees.

- 2. Candidates for the degree of Doctor of Medicine are required to present a dissertation, and, if the dissertation be accepted, to pass an examination. The dissertation, of which the subject must previously have received the approval of the Board of the Faculty of Medicine, must embody the results of personal observations or original research, either in some department of medicine or of some science directly related to medicine, provided always that original work, published in scientific journals, or in the Proceedings of learned societies, or separately, shall be admissible in lieu of or in addition to a dissertation specially written for the degree. Candidates will be required to write a short extempore essay on some topic connected with medicine, and to answer questions on the history of medicine. They will also be examined orally on the dissertation or other work submitted. Any candidate may be exempted from a part or the whole of the examination if the Board of the Faculty so decide. No candidate will be admitted to the degree unless his application, after report from the Board of the Faculty of Medicine, shall have been accepted by the Senate.
- 3. The names of candidates who have been approved for the degree of Doctor of Medicine shall be published in alphabetical order.

# Degree of Master of Surgery

- 1. No candidate shall be admitted to the degree of Master of Surgery unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.
- 2. Every candidate, before presenting himself for the examination for the degree of Master of Surgery, is required to have graduated as Bachelor of Medicine and Bachelor of Surgery, and to furnish certificates of attendance in accordance with the Regulations of the University.

3. Subjects of Examination:

Surgical Anatomy Surgery Operative Surgery Clinical Surgery Ophthalmology

Pathology and Bacteriology.

4. The names of candidates who have satisfied the Examiners shall be published in alphabetical order.

#### VII. DEGREES IN DENTAL SURGERY

(Ordained, May 30, 1906)

 The degrees in Dental Surgery shall be: Bachelor of Dental Surgery (B.Ch.D.) Master of Dental Surgery (M.Ch.D.)

## Degree of Bachelor of Dental Surgery

- 2. All candidates for the degree of Bachelor of Dental Surgery shall be required to have passed the Matriculation examination, to have pursued thereafter approved courses of study for not less than five academic years, two of such years at least having been passed in the University subsequently to the date of passing Parts I and II of the First examination, and to have completed such period of pupilage or hospital attendance, or both, as may be prescribed by the Regulations of the University. No candidate shall be admitted to the degree who has not attained the age of twenty-one years on the day of graduation.
- 3. All candidates shall be required to have passed the following examinations: the First examination, the Second examination, the Final examination.
- 4. Each examination shall include practical work in the subjects offered.
- 5. All candidates shall be required, before presenting themselves for examination, to furnish to the Registrar certificates testifying that they have attended the prescribed courses of instruction in accordance with the regulations of the University in each of the subjects which they offer, and that they have fulfilled the other requirements of the Ordinance and Regulations in respect of such examination

#### First Examination

6. The first examination shall consist of three parts:

Part I. Physics Chemistry

Part II. Biology

Part III. Dental Mechanics Dental Metallurgy.

- 7. Candidates shall be allowed to pass in each part separately.
- 8. Candidates who have passed the Intermediate examination for the degree of Bachelor of Science, and have in that examination satisfied the Examiners in Chemistry, in Physics, or in Biology, shall, on payment of the difference between the fees required for the two examinations, be regarded as having satisfied the requirements of Parts I and II of the First examination for the degree of Bachelor of Dental Surgery, in those subjects in which they have passed.
- 9. Candidates shall be required, before presenting them selves for Parts I and II of this examination, to have passed the Matriculation examination, and to have attended courses of instruction in accordance with the Regulations of the University.
- to Candidates shall be required, before presenting themselves for Part III of this examination, to have completed two years from Matriculation, and to have attended courses of instruction in accordance with the Regulations of the University.

#### Second Examination

11. The subjects of the Second examination shall be:

Anatomy

Physiology

Dental Anatomy and Physiology

Dental Materia Medica.

12. Candidates shall be required, before presenting themselves for the Second examination, to have passed the First examination not less than one year previously, and to have attended courses of instruction in accordance with the Regulations of the University.

#### Final Examination

13. The subjects of the Final examination shall be:

Dental Surgery

Dental Pathology and Bacteriology Operative Dental Surgery Medicine and Surgery.

Medicine and Surgery.

14. Candidates shall be required, before presenting themselves for the Final examination, to have passed the First examination not less than two years previously, to have passed the Second examination not less than six months previously, and to have attended courses of instruction in accordance with the Regulations of the University.

# VIII. RECOGNITION OF VICTORIA UNIVERSITY COURSES AND EXAMINATIONS

(Ordained, March 8, 1905)

- (a) The Senate, or any Committee of the Senate appointed for that purpose, is hereby empowered to recognise courses of study pursued and examinations passed by students of the Yorkshire College or of the University of Leeds in the Victoria University or the Victoria University of Manchester prior to January 1, 1905, as equivalent to corresponding courses and examinations in the University of Leeds.
- (b) The Senate, or any Committee of the Senate appointed for that purpose, is hereby also empowered to make such concessions in exemption from examinations and from attendance on courses of study, as may be required to place a past or present student of the University or of the Yorkshire College, who has been admitted thereto before 1st October, 1904, in as favourable a position in the above respects as if he had become or had continued to be a student of the Victoria University or of the Victoria University of Manchester.
- (c) A student of the Yorkshire College, who before December 31, 1904, has passed a Final examination of the Victoria University or of the Victoria University of Manchester, for the Bachelor's degree in the Faculty of Arts, Science, Law, or Medicine shall be entitled to be admitted to the Bachelor's degree of the University of

Leeds; and if he has been admitted to the Bachelor's degree of the Victoria University or the Victoria University of Manchester he shall be entitled to proceed to the higher degrees of the University of Leeds on the same conditions as if he had graduated in this University.

# IX. RECOGNITION OF COURSES AND EXAMINATIONS OF OTHER RESIDENTIAL UNIVERSITIES

(Ordained, March 8, 1905)

- (a) Subject to the provisions of the Charter and Statutes, the Senate, or any Committee of the Senate appointed for that purpose, is hereby empowered to allow members of any University, in which residence is required as a condition of graduation, or members of any University who have attended courses of study at some College or other place of learning which is affiliated or associated with such University, after Matriculation at the University of Leeds, and presentation of certificates of conduct satisfactory to the Senate or Committee, to count such periods of residence passed by them at such other University as equivalent to such periods of residence at the University of Leeds as the Senate or Committee may determine, provided that no degree of this University shall be conferred on any such person unless he shall have pursued an approved course of study in this University extending over at least two years, and shall have passed the Final examination for such degree.
- (b) Undergraduates of other Universities who have been admitted, under this Ordinance, as members of this University may be allowed to count examinations passed by them at such other Universities as equivalent to such examinations or portions of examinations other than the Final examination of this University as the Senate, or any Committee of the Senate appointed for that purpose, may from time to time determine.

# X. CONFERMENT OF DEGREES UPON FORMER STUDENTS OF THE YORKSHIRE COLLEGE

(Resolved, March 8, 1905; ordained, March 2, 1906)

1. As to conferment of ad eundem degrees on student, who have attended full courses of study at the Yorkshire

College and have graduated at various Universities, but who have not been admitted to the College Associateship:

- (a) Graduates of the Victoria University shall be offered the same degrees in the University of Leeds as those which they have received from the Victoria University.
- (b) Graduates in Medicine of other Universities shall be admissible on application to the M.B. degree of the University of Leeds.
- (c) Applications from non-medical graduates of other Universities who have been students of the Yorkshire College shall be considered on their merits.
- (d) In every case of admission under the above conditions a fee of 10s. 6d. shall be charged.
- 2. As to Associates of the Yorkshire College:
- (a) Graduates of the Victoria University shall be offered the same degrees in the University of Leeds as those which they have received from the Victoria University.
- (b) Graduates of other Universities shall be offered the degree of Bachelor in this University in the Faculties in which they graduated elsewhere.
- (c) The question of the admission to degrees of Associates *honoris causa* shall be deferred.
- (d) The following Associates by examination and otherwise shall be admissible to the several degrees set against their names respectively, viz.: Herbert Ingle, to the degree of B.Sc.: Charles Arthur Watson to the degree of B.A.; Alired Parkin to the degree of M.B.: Edgar Johnson Allen, Arthur Edward Potter, Herman Emil Schmitz, William Wright Marriner, Herbert Hutchinson, George Robert Thompson, Julian Stanton Wise, Harry Medforth Dawson, Antonius Joseph Manasseh, Reuben Shacksnovis, Henry Archbold Smith, to the degree of B.Sc.
- (e) All Associates of the Yorkshire College admitted to degrees of the University of Leeds under these conditions shall be admitted without fee.
- 3. All persons admitted to degrees of the University of Leeds under the loregoing conditions shall be admissible as life members of the Convocation of the University.

4. No graduate admitted under the above conditions to a lower degree shall be precluded from proceeding in the University of Leeds to a higher degree in his particular faculty.

# XI. STANDING OF CERTAIN GRADUATES IN PROCEEDING TO HIGHER DEGREES

(Ordained, March 2, 1906)

- r. Graduates of other Universities who have been admitted to degrees of equal or similar rank in this University shall be allowed, in proceeding to higher degrees, to count their standing as graduates from the date of their graduation in such other Universities.
- 2. Associates by examination of the Yorkshire College who have been admitted to degrees in this University shall be allowed, in proceeding to higher degrees, to count their standing as graduates from the date of admission to the Associateship.

## XII. AWARD OF DEGREES BY SENATE.

(Revolved, May 18, 1904; ordained, March 2, 1906)

The Senate is hereby empowered to award degrees other than (1) ad eundem degrees, (2) degrees conferred on officers of the University, and (3) honorary degrees, in accordance with the provision in that behalf contained in Statute I. b.

## XIII. AWARD OF DEGREES BY COUNCIL.

(Resolved, March S, 1905; ordained, Much 2, 1906)

- 1. The Council is hereby authorised to grant to any Professor of the University, or to any Lecturer who is the head of any department in the University, a degree not higher than that of Master in the Faculty in which he has graduated, or, in the case of a Professor or Lecturer holding no degree, such degree, not higher than that of Master, as the Council may determine.
- 2. The Council is authorised, if it thinks fit, to grant to any other officer of the University such degree, not higher than that of Master, as it may determine, but no such degree shall be conferred until a report thereon has been received from the Senate.

3. No Medical degree shall be conferred under either of the above provisions (1) and (2) upon a person who does not already possess a registrable medical qualification; and no person, in virtue of a degree conferred under either of these provisions, shall be allowed to proceed to a degree higher than that to which he has been admitted.

# XIV. JOINT MATRICULATION BOARD AND JOINT COMMITTEES

(Resolved, May 18, 1904; amended and ordained, March 2, 1900)

The Council is hereby empowered to elect annually, or as may be required:

- Five members of the Joint Matriculation Board of the Universities of Manchester, Laverpool, Leeds, and Sheffield.
- 2. Three members of a Joint Committee of the Universities of Manchester, Liverpool, and Leeds, to consider objections which may be raised by one or more of those Universities, to Statutes or Ordinances proposed by any or them, or by the University of Sheffield.

#### XV. DIPLOMAS

(Ordained, March 8, 1905; amended, March 2, 1906)

Diplomas shall be granted by the University, in such subjects as the Council may from time to time determine, to students who pursue the courses of study and pass the examinations prescribed.

The Council is empowered to make from time to time Regulations under which such diplomas shall be awarded.

The award of diplomas under the provisions of this Ordinance is delegated to the Senate.

#### XVI. REGULATIONS FOR PROCEDURE

(Resolved, May 18, 1901; ordained, March 2, 1906)

The Council, Senate, Faculties, Boards of Faculties, and Convocation are hereby empowered to enact Regulations for the conduct of their business and that of their Committees, subject to the provisions of the Charter and Statutes.

### XVII. FEES

(Ordained, March S, 1905)

The Council is hereby empowered, after giving the Senate an opportunity of reporting thereon, to appoint such Registration, Examination, Class, Laboratory, and other fees to be paid by students and others as the Council may from time to time determine, and to increase, reduce, or abolish the same.

### XVIII. REGULATIONS FOR EXAMINATIONS

(Ordained, March 8, 1905)

Subject to the provisions of the Charter, Statutes, and Ordinances of the University, the Council is hereby empowered to adopt regulations, or to delegate to the Senate the making of regulations, as to the subjects, times, modes, and standards of the examinations.

### XIX. ADMISSION TO EXAMINATIONS

(Ordained, March S, 1905)

Before admission to any examination candidates must pay the examination fee. The admission of all students to the examinations of the University shall be subject to the approval of the Vice-Chancellor.

#### XX. EXTERNAL EXAMINERS

(Ordained, March 8, 1905)

The Council is hereby empowered to appoint, on the recommendation of the Senate, such External Examiners on such conditions as to tenure of office, remuneration, and otherwise as it may from time to time determine.

#### XXI. PRIZES

(Ordained, March S, 1905)

The Council is hereby empowered, upon report from the Senate, to institute such class and other prizes as it may from time to time determine, and to vary their value and to abolish the same.

# XXII. EXAMINATION OF SCHOOLS, AND EXTENSION LECTURES

(Ordained, March 8, 1905)

The Senate is hereby empowered to examine and nspect schools and other educational institutions, and to

provide lectures and instruction for persons not members of the University under such Regulations as the Council may from time to time adopt. The Senate is empowered to award certificates in connection with lectures and instruction for persons not members of the University.

# XXIII. TENURE OF OFFICE OF DEANS OF FACULTIES

(Ordained, March 8, 1905)

Deans of Faculties shall be elected for periods not exceeding two years at a time.

# XXIV. TENURE OF OFFICE OF ADDITIONAL MEMBERS OF THE SENATE

(Ordained, March 8, 1905)

Such additional Members of the Senate of the University as may be appointed by the Court under Statute V. shall be appointed for one year only, but shall be re eligible at the end of each year.

## XXV. REGISTER OF CONVOCATION

(Ordained, March 2, 1906)

- 7. The Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the members of the Senate and the Lecturers shall be registered as members of Convocation without payment of any fee, and their names shall be continued upon the Register so long as they retain their qualifying offices.
- 2. Graduates who have been admitted to degrees of this University by reason of their having pursued courses of study in the Yorkshire College, and having been admitted to degrees of other Universities or to the Associateship of the Yorkshire College, shall be entitled to be registered immediately as life members of Convocation without payment of any further fee.
- 3. Bachelors of this University of three years' standing and Masters and Doctors shall be entitled to be registered as members of Convocation upon payment of a fee of tos. 6d.

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#### Vice-Chancellor

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The Pro-Chancellor Edwin Woodhouse	1
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Bridlington Grammar School - C. G. WHEELIG D. Sc., F. R.	
Brighouse School for Girls - 3Miss H. ROBE	RTSON Feb. 21, 1909
Castleford Secondary School - C. M. GILLES Coxwold Charity 3H. M. DAWS	
Dewsbury — Endowed Schools & Professor CLAN	PHAM Dec. 20, 1910
Doncaster Grammar School - 3C. B. COOKE Y	ARBOROUGH July 19, 1908
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Harrogate Secondary School - Miss H. Rob	, .
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ACLAND  Don't Coat Communication Solved Street Control of Coat Control of Coat Coat Coat Coat Coat Coat Coat Coat	Sept. 17, 1908
Pontefiaet Grammar School - Prictessor Gra Rastrick Grammar School - Professor Rob	
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with
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Surgery	Professor: H. LITTLEWOOD, M.Sc., Leeds, F.R.C.S.
	Honorary Demonstrator: J. A. COUPLAND, M.B., B.Sc., London, F.R.C.S.
Practical Surgery	Lecturer: R. LAWFORD KNAGGS, M.A., M.D., M.C., Gonville and Caius College, Cambridge, F.R.C.S.
Operative Surgery	Lecturer: WALTER THOMPSON, F.R.C.S.
Obstetrics	Professor: C. J. WRIGHT, M.Sc., Leeds, M.R.C.S.
	Honorary Demonstrator: E. O. CROFT, M.D., Durham, M.R.C.S., L.R.C.P.
Gynæcology	Lecturer: J. B. HELLIER, M.D. London, M.R.C.S.
Therapeutics, Pharmacy and Materia Medica	Professor of Therapeutics: E. F. TREVELVAN, M.D., B.Sc., London, F.R.C.P.  Demonstrator of Pharmacy and Materia Medica: J. H. GOUGH.
Public Health .	Professor. J. SPOTTISWOODE CAMERON, B.Sc., M.D., C.M., Edinburgh. Honorary Demonstrator: C. PORTER, M.D., B.Sc. (Public Health), M.R.C.P., Edin- burgh.

Forensic Medicine Professor: H. J. CAMPBELL, M.D., London, F.R.C.P.

Demonstrator of Practical Toxicology:
F. W. EURICH, M.D., C.M., Edinburgh.

Ophthalmology and Otology

and Otology Lecturer: H. SECKER WALKER, M Sc., Leeds, F R.C.S.

Mental Diseases . Lecturer: W. BEVAN-LEWIS, M.Sc., Leeds, L.R.C.P., M.R.C.S.

Vaccination . . . Instructor : A. T. BACON, L.R.C.P.E., M.R.C.S.

### **Emeritus Professors**

JOHN EDWIN EDDISON, M.D., late Professor of Medicine.

A. W. MAYO ROBSON, D.Sc., F.R.C.S., late Professor of Surgery.

#### Clinical Lecturers

The following Members of the Lionorary Staff of the Leeds General Infirmary:--

Medicine

A. G. BARRS, M.D., F.R.C.P.,

T. WARDROP GRIFFITH, M.D., C.M., M.R.C.P. (Hon. Physicians).

E. F. TREVELYAN, B.Sc., M.D., F.R.C.P. (Hon. Physician with charge of Out-patients).

patients).
W. H. M. TELLING, M.D., M.R.C.P.
(Hon. Assistant Physician).

Surgery .

F. WARD, M.A., M.B., B.C., F.R.C.S.,

H. LITTLEWOOD, M.Sc., F.R.C.S., R. LAWFORD KNAGGS, M.A., M.D.,

M.C., F.R.C.S., B. G. A. MOYNIHAN, M.S., F.R.C.S., (Hon. Surgeons).

W. THOMPSON, F.R.C.S.,

J. F. DOBSON, M.B., M.S., F.R.C.S., (Hon. Assistant Surgeons).

Gynæcology .

. J. B. HELLIER, M.D., M.R.C.S. (Hon. Obstetric Physician).

Ophthalmology and Otology

and Otology H. SECKER WALKER, M.Sc., F.R.C.S., A. L. WHITEHEAD, M.B., B.S., (Hon. Surgeons of the Eye and Ear Department).

G. CONSTABLE HAYES, F.R.C.S., (Hon. Assistant Surgeon of the Eye and Ear Department).

Infectious Diseases.

A. E. PEARSON, M.R.C.S., L.R.C.P. (Medical Superintendent Leeds City Fever and Small Pox Hospitals).

## Lecturers in the School of Dentistry

Dental Surgery . ARTHUR G. G. PLUMLEY, M.B., London, M.R.C.S., L.R.C.P., L.D.S.

Operative Dental

Surgery. . THOMAS S. CARTER, L.D.S.

Dental Anatomy

and Physiology A. ALAN FORTY, L.D.S.

Dental Mechanics CHARLES RIPPON, L.D.S.

## External Examiners

- Greek: LEWIS RICHARD FARNELL, M.A., D.Litt., Fellow, Tutor, and Dean of Exeter College, Oxford.
- Latin: RLV. THOMAS LESLIE PAPILLON, M.A., late Fellow, Tutor, and Dean of New College, Oxford.
- English Literature and Language: GEORGE CAMPBELL MACAULAY, M.A., Lecturer in English, University of Cambridge.
- French: LÉON KASTNER, M.A., Professor of French, University College of Wales, Aberystwyth.
- $German: KARL\ BREUL,\ M.A.$ , Litt.D., Ph.D., Reader in Germanic-University of Cambridge.
- History and Economics: P. F. WILLERT, Honorary Fellow of Exeter College, Oxford.
- Philosophy: JOHN HENRY MUIRHEAD, M.A., LL D., Professor of Philosophy, University of Birmingham.
- Education: SAMUEL SIGMUND FECHHEIMER FLETCHER, M.A., Ph.D., Lecturer on Education, University of Cambridge.
- Law: ALFRED FRANK TOPHAM, M.A., LL.M., Fellow of Queens' College, Cambridge.
- Mathematics: RALPH ALLEN SAMPSON, M.A., D.Sc., F.R.S., Professor of Mathematics, University of Durham.
- Physics: ARNOLD WILLIAM REINOLD, M.A., F.R.S., Professo of Physics, Royal Naval College, Greenwich.
- Chemistry: STR WILLIAM RAMSAY, K.C.B., D.Sc., F.R.S., Professor of Chemistry, University College, London.
- Zoology: SIDNEY FREDERIC HARMER, Sc.D., F.R.S., Fellow of King's College, Cambridge.
- Botany: FRANCIS WALL OLIVER, D.Sc., F.R.S., Quain Professor of Botany, University College, London.
- Geology: CHARLES LAPWORTH, M.Sc., LL.D., F.R.S., Professor of Geology and Physiography, University of Birmingham.

- Engineering: THOMAS HUDSON BEARE, B.Sc., M.I.C.E., M.I.M.E., Regius Professor of Engineering, University of Edinburgh.
- Electrical Engineering: WILLIAM EDWARD AYRTON, F.R.S., Dean of Central Technical College, South Kensington.
- Applied Chemistry (Chemistry of Leather Manufacture): J. T. WOOD.
- Applied Chemistry (Dyeing and Tinctorial Chemistry): RAPHAEL MELDOLA, F.R.S., Professor of Chemistry, Finsbury Technical College, London.
- Agriculture: JAMES WILSON, M.A., B.Sc., Royal College of Science, Dublin.
- Anatomy: ARTHUR KEITH, M.D., F.R.C.S., Lecturer in Anatomy at the London Hospital Medical School.
- Physiology: ERNEST HENRY STARLING, M.D., F.R.S., Jodrell Professor of Physiology, University College, London.
- Materia Medica and Pharmacy: JAMES CALVERT, M.D., F.R.C.P., Lecturer on Materia Medica, St. Bartholomew's Hospital.
- Pathology and Bacteriology: FREDERICK WILLIAM ANDREWES, M.D., F.R.C.P., Lecturer on Pathology, St. Bartholomew's Hospital.
- Public Health: ROBERT BRUCE LOW, M.D., Medical Inspector, Local Government Board, Whitehall.
- Forensic Medicine: WILLIAM HENRY WILLCON, M.D., London, Lecturer on Forensic Medicine, St. Mary's Hospital, London.
- Medicine and Mental Diseases: THEODORE DYKE ACLAND, M.D., F.R.C.P., Physician to St. Thomas's Hospital, London.
- Surgery: RAYMOND JOHNSON, M.B., F.R.C.S., Surgeon to University College Hospital.
- Obstetrics and Gymecology: THOS, WATTS EDEN, M.D., F.R.C.P., Assistant Obstetric Physician, Charing Cross Hospital.
- Pharmacology and Therapautics: JAMES CALVERT, M.D., F.R.C.P., Lecturer on Materia Medica, St. Bartholomew's Hospital.
- Dentistry: J. LEWIN PAYNE, L.D.S., M.R.C.S., L.R.C.P., Assistant Dental Surgeon and Lecturer on Dental Mechanics, Guy's Hospital.

# Honorary Marshal to the University

LIEUT.-COL. G. H. ROWE, V.D., 3rd Vol. Batt. P.W.O. (West Yorkshire) Regt.

#### THE

## UNIVERSITY OF LEEDS

Session 1907-1908

# Faculties of Arts (including Commerce and Law), Science and Technology<sup>1</sup>

## UNIVERSITY TERMS

The University session, or academic year, is divided into three terms. The first term begins Monday, September 30, 1907, and ends Thursday, December 19, 1907; the second term begins Wednesday, January 8, 1908, and ends Wednesday, March 25, 1908; the third term begins Wednesday, April 22, 1908, and ends Saturday, June 27, 1908.

## ADMISSION OF STUDENTS

The classes and laboratories are open to men and women on the same terms. Special arrangements are made for the convenience of women students.

No day students are admitted under the age of sixteen years. Students under seventeen years of age may be required to pass an entrance examination. (See p. 118.)

Candidates for admission to the University who are under nineteen years of age, and who have been at a school or other educational institution within one year of their application for admission, are required to produce a certificate of good conduct from the head of such institution.

All students are required, prior to admission, to sign a declaration that they will observe the statutes, ordinances, and regulations of the University for the time being.

The Vice-Chancellor will admit students on Monday, September 30, and Tuesday, October 1, 1907, from 9.30 a.m. to 12.30 p.m., and from 2 to 5 p.m. The Professors and Lecturers will be present to confer with intending students and to give them advice respecting their courses of study. Women students are requested to consult the Mistress of Method as to their studies before presenting themselves to

<sup>1</sup> For information respecting the School of Medicine, see page 300.

the Vice-Chancellor. The Registrar will be in attendance to receive the fees and register students whose courses of study have been approved by the Vice-Chancellor.

All students (excepting those entering the Department of Agriculture<sup>1</sup>) are expected to register their names on one of

these days.

### ENTRANCE EXAMINATIONS

## 1. For Degree Students

All students who intend to present themselves as candidates for a degree in the University of Leeds are required, before entering upon their degree course, to have passed the Matriculation examination of the Universities of Manchester, Liverpool, Leeds and Sheffield, or to have received from the Joint Matriculation Board a Certificate of Exemption from that examination. particulars of the Matriculation examination, see page 132.

## 2. For other Students

Students under seventeen years of age who wish to pursue a course of study in the day classes of the University without proceeding to a degree are required, before entering, to have satisfied one of the following requirements:

(a) To have passed the Matriculation examination

(b) To have passed some other public examination approved by the Vice Chancellor.

(c) To have gained a scholarship or exhibition awarded

by the University after open competition.

(d) To have passed the special examination for entrance to the Engineering departments (see below), including English Composition and Dictation.

(e) To have passed an Entrance examination in each of the following subjects: Arithmetic, including decimals and proportion; Algebra, to simple equations; Geometry, the first book of Euclid or its equivalent; English Composition and Dictation.

<sup>1</sup> The winter course in Agri alture begins Monday, October 14, 1907.

<sup>2</sup> This examination will be held on Tuesday, October 1, 1907, the English subjects at 10 a.m., and the mathematical subjects at 2 p.m.; and no subsequent examination for entrance will be held during the Session. No candidate can be examined whose name has not been notified to the Registrar by the morning of Monday, September 30.

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The Vice-Chancellor may dispense with the requirement of an entrance examination in the case of students who are presenting themselves for one or two lecture courses only.

Candidates for admission to the departments of Civil, Mechanical, Electrical or Mining Engineering are required either to have passed the Matriculation or some other approved examination, including Mathematics, or to pass a special entrance examination. This examination is not imposed, however, in the case of students who have taken a satisfactory position in the Evening Class examinations.

## **FEES**

All Fees are payable to the Registrar. Cheques should be made payable to "The University of Leeds," and crossed "Beckett & Co."

## I. Entrance Fee

In addition to class fees, each student attending any regular day class for which a fee of £1 1s, or upwards is charged will be required to pay on entering the University a registration and library fee of £1 1s. Day students attending one or two courses of lectures only may, if they prefer it, pay in lieu of the registration and library fee a sessional fee of 7s, for each class attended.

# 2. University Union Fee

The subscription of 10s. 6d. per year to the University Union is obligatory, with certain exceptions, on students attending the University for more than six hours per week, and is payable to the Registrar at the beginning of the session. This subscription entitles students to the use of the common-rooms (which are supplied with the daily papers, current periodicals, &c.), to free instruction in the University gymnasium, and to the use of the athletic ground and tennis courts.

# 3. Lecture and Laboratory Fees

# (a) General Regulations

The fees for lecture and laboratory courses are payable in advance. The Registrar will supply a class ticket entitling the student to attend the courses for which fees

<sup>1</sup> For particulars of subjects, dates, and conditions of this examination see page 257.

120 Fees

have been paid: this class ticket must be presented by the student to the Professor or Lecturer whose courses he attends, before entering on the course.

In the case of the withdrawal from the University of any student during the session, no claim to a return of fees is recognised.

Students who attend all the classes constituting the complete course required for a degree examination, or for a diploma of the University, or for the Associateship of the Institute of Chemistry, may compound for the lecture fees at a reduction of one tenth.

# (b) Lecture Fecs

The fee for each course of lectures is appended to the syllabus of the course.

Where a student for special reasons pays for only one or two terms, the following fees will as a rule be charged:

Where the Fee for the Session is	The Fee for Two Terms will be	The Fee for One Term will be			
£ s. d.	£ 5 d.	£ 5, d.			
î 11 6	150	0 15 0			
2 2 0	1 15 0	1 1 0			
2 12 0	2 2 0 .	150			
3 3 0	2 12 6	111 6			
3 13 6 .	2 17 6 .	1 15 0			
4 4 0	3 3 0	2 2 0			
\$ 50	1 1 0	2 12 6			

Where a class meets for two terms only, the fees will be as follows:

Where the Two Te		The Lec for One Term will be					
£ 、	d		L	5	d		
1 1	O		O	15	O		
1 11	b		1	1	O		
2 2	O		1	5	0		
2 12	6		1	11	6		
3 3	O		2	2	0		
3 13	t		2	5	U		
4 4	O		2	I 2	6		
5 5	O		3	3	0		

# (c) Laboratory Fees

The following are the fees payable for Laboratory and other practical work in each of the following departments, viz.: Physics, Chemistry, Zoology, Botany, Geology, Engineering,

Fees 121

Electrical Engineering, Mining, Metallurgical, Textile Industries, Dyeing and Tinctorial Chemistry, Leather Industries. Six hours are counted as one day:

Days		ee fo		Fee		Fee for				
per Week.	the	Sess		Two Terms.				One Term.		
	L	5.	d.	6 5.	d.		£s.	d.		
1/2	 3	3	О	 2 12	6		1 11	6		
I	 5	5	О	 4 4	0		2 12	6		
1 ½	 7	7	0	5 15	6		3 3	O		
2	 9	9	O	6 16	6		3 13	6		
$2\frac{1}{2}$	 11	II	О	7 17	6		4 4	О		
3	 13	13	О	 9 9	0		5 5	О		
3 ½	15	15	О	I1 C	6		5 15	6		
4	16	16	О	12 I	6		6 6	O		
4 3	17	17	0	12 12	0		6 16	6		
5	 18	18	О	13 13	0		7 7	О		
5 }	19	19	O	14 3	_		7 17	6		
6	21	Ó	0	15 4	6		8 8	0		

# (d) Fees for Research Students

Persons desirous of pursuing original Research can be admitted, subject to certain regulations, to any of the University laboratories on reduced terms, which may be obtained on application to the Registrar. Applications for admission must be made to the head of the department concerned, and the admission is subject to the approval of the Council after report received from the Senate.

# (e) Fees for Complete Courses

The fees for complete courses of lectures and laboratory work qualifying for degrees and diplomas vary according to the subjects taken. The following estimates are in most cases only approximate.

Matriculation. The cost to a student taking in the University the full course of lectures for the examination is about £19, inclusive of the Entrance and Union fees.

Degree of B.A. The fees for complete courses qualifying for the Intermediate, Final (Ordinary), and Honours examinations, amount to about £16 in each year, exclusive of the Entrance and Union fees, and of fees for any laboratory work that may be required for the Intermediate examination.

Degree of I.I.B. A composition fee of £8 8s. in each year; composition fee covering the lectures for the degree and for the Solicitors' examination £10 10s. in each year. These fees do not include Entrance and Union fees, or fees for any laboratory work that may be required for the Intermediate examination.

T22 Fees

Degree or Diploma in Commerce. About £18 in each year.

Diploma in Education. Composition fee of £14 14s., exclusive of Union fee.

Degree of B.Sc. The fees for complete courses qualifying for the Intermediate, Final (Ordinary), and Honours examinations, amount to about £25 in each year, exclusive of the Entrance and Union fees. If the courses taken include much laboratory work, the fees are somewhat higher.

Departments of Engineering, Electrical Engineering, Mining. The fees for a full year's course in each amount to about £30.

Departments of Textile Industries, Dyeing and Tinctorial Chemistry, Leather Industries. The fees for a full year's course in each amount to about £25.

Agriculture. Composition fees, for winter course £10, for summer course £5, inclusive of Entrance and Union fees.

# Composition Fees for Honours Students in Arts.

					First Year. Guincas.				Third Year. Guineas.	
Classic	:s				18		17		13	
Moder	n Lang	uages-								
	French				19		19		19	
(6)	French	, Gern	nan, Ei	iglish	20		20		20	
Histor	у			٠	16		16		16	
Englis	ĥ				16		13		10	
Philose							12		10	

## 4. Examination Fees

No fee will entitle to admittance to more than *one* examination. Unless otherwise stated, the fee for a second or subsequent examination is the same as that for the first.

For the Matriculation examination, £2, but a candidate who has failed in the July examination in any year will be admitted to the September examination in the same year for £1 10s.

For the Intermediate examination for the degree of B.A., or B.Sc., or LL.B., or B.Com., £,1.

For the Final examination for the Ordinary or Honours degree of B.A. or B.Sc., LL.B., or B.Com., £1.

For the Final Examination for the Honours degree of B.A. or B.Sc., in cases where no fee has been paid for the Intermediate examination, £2.

For the final Examination for a degree in Honours when the Ordinary Final examination has previously been taken,  $\mathcal{L}_1$ .

For the examination in Education for the Government Certificate, 5s.

For the Diploma examination in any subject in the Faculties of Arts or Science, f, 1.

Candidates who are allowed to take any examination in two or more parts will be required to pay the full fee for such examination when entering for the first part.

Candidates who, having failed at an Intermediate or Final examination or an examination for a Diploma in Arts or Science, present themselves again for examination will be charged the same fee as that for the first examination. This rule is subject to the following conditions for special cases:—

When the regulations allow a candidate to take part of an Intermediate or Final Examination separately, the following fees will be charged for re-examination, viz:—

(a) For the additional subject at Intermediate stage for B.Sc., 5s.

(b) For a subsidiary subject at Final stage for B.A. or B.Sc., 5s.

(c) For the Essay for B.Sc, 5s.

(d) For a principal subject at Final stage for B.Sc., £1.

# 5. Degree Fees1

On the conferment of any degree in the Faculties of Arts (including Commerce and Law) and Science, £5.

## ACADEMIC DRESS

All Hoods are to be of a Green shade, combined with Black, White, Scarlet, or with one another, to produce the variations required for the several Degrees, namely:

B.A., a self-coloured Hood of Dark Green shade.

B.Sc., a self-coloured Hood of Middle Green shade.

LL.B., a self-coloured Hood of Light Green shade.

M.B. and Ch.B., a Hood of Dark Green, lined with Light Green.

M.A., a Dark Green Hood, with White Lining.

M.Sc., a Middle Green Hood, with White Lining.

<sup>1</sup> These do not apply to Honorary Degrees.

M.Ch., a Dark Green Hood, edged with Light Green, and lined with White.

All Bachelors' Hoods are to be lined, and all Bachelors' and Masters' Hoods are to be of the single or Oxford pattern.

The Doctor's Gown is to be of Scarlet, with facings and sleeve linings of the shade of Green distinctive of his faculty. The Hood is to be of Scarlet, lined with the distinctive shade or shades of Green. The Full Dress Cap is to be of the usual pattern, with a Gold Cord, and a lining of the shade of Green distinctive of the faculty.

## REGULATIONS FOR STUDENTS

#### General

- 1. Students who do not return punctually at the beginning of the term are liable to be refused permission to keep the term. In case of delay in entering, due to illness or other unavoidable cause, a communication must be made to the Vice-Chancellor.
- 2. Students are required to keep the Vice-Chancellor and Registrar informed of their addresses. Any alteration of address must be communicated without delay.
- 3. Students are required to provide themselves with the books used in the classes which they attend, and with a copy of the University Calendar.
- 4. A student dismissed for idleness or misconduct will forfeit all fees and privileges.
- 5. Students are required to replace or repair any apparatus or other property destroyed or damaged by their fault.
- 6. The Students' Common Rooms are under the management of the University Union, and the Committee of the Union are empowered to impose fines in case of damage done to the property in their charge. An appeal against any decision of the Union may be made to the Senate.
- 7. The use of a locker may be secured by the deposit of 3s. with the Hall Porter. A charge of 2s. per session will be made, the balance of the deposit money being repaid at the end of the session when the key is returned. A student will be charged for repairing any damage to the

locker while in his possession, or for loss of keys, &c. Lockers are also provided for members of the Tennis Club, and may be secured by the deposit of 2s. of which 1s. will be repaid when the key is returned.

#### Lectures

8. No student is permitted, except with the leave of the Vice-Chancellor, to attend any lecture course or laboratory work until he has received from the Registrar his class ticket, which must be presented to the Heads of the Departments in which he enters before his course of study is begun.

9. Students who fail in their class examinations may be required to repeat their courses of study or to leave the University. In cases of repetition of courses the full fees

will have to be paid for the repeated course.

10. When a student is absent from illness or other unavoidable cause a written explanation must at once be sent to the Vice-Chancellor, who will communicate it to the Heads of the Departments in which the student is attending Students desiring leave of absence must obtain it from the Vice-Chancellor.

#### Vacations

11. The Senate desire it to be understood that study is expected from students during vacations. Arrangements are made by which the laboratories are open during a portion of the Long Vacation to students capable of independent work. Application for admission must be made to the Heads of Departments, with whom the decision as to the suitability of students for admission rests. The scale of fees chargeable can be obtained at the Registrar's office.

In many cases the vacation time of students in technical departments can be most profitably employed in obtaining practical experience in works. Assistance to obtain admission to works will, so far as practicable, be given by the Professors. In other cases, before the vacation begins, Professors and Lecturers will be prepared to make recommendations to students as to the private study which should be carried on during the vacation in preparation for the next session.

### **GYMNASIUM**

Instructor: MASON CLARKE.

The Gymnasium is free to all members of the University Union. It is reserved for the use of women students at suitable hours which, together with those arranged for other classes, will be announced at the beginning of the session.

### LYDDON HALL

(Licensed by the Court of the University as a Hall of Residence)

### Visitors:

N. Bodington, M.A., Litt.D., LL.D., Vice Chancellor Professor A. S. Grunbaum, M.A., M.D., F.R.C.P., D.P.H., Dean of the Faculty of Medicine

THE REV. SAMUEL BICKERSTEIN, D.D., Vicar of Leeds THOMAS PRIDGIN TEALE, M.A., D.Sc., F.R.S.

#### Resident Warden:

HERBERT ROWE, Senior Hon, Surgeon, the Public Dispensary, Leeds.

#### Sub-Warden:

R. VEITCH CLARK, M.A., M.B., Demonstrator, Department of Physiology.

The object of this Institution is to supply men students with the advantages of a common collegiate life, by providing a Hall of Residence similar to those which have been established in connection with the Victoria University of Manchester, with the Edinburgh University, and with some of the London Medical Schools.

The Hall of Residence has been erected upon a suitable site within five minutes' walk from the University, and is furnished with every attention to the health and comfort of the students. The accommodation consists of Dining Hall, Recreation Room, and other rooms for common use, and a separate room furnished as a private study and bedroom for each student. The charge is twenty one guineas for each of the first and second terms and eighteen guineas for the third term for students in the Faculties of Arts, Science, and Technology, who keep a session of about 33 weeks: and twenty-three guineas a term for students in the School of Medicine, whose session lasts about 38 weeks.

Applications for admission should be sent to the Warden, Lyddon Hall, Virginia Road, Leeds, who may be seen at the Hall on any day between one and two o'clock.

### LODGING AND BOARDING HOUSES

A List of Lodging and Boarding Houses which have been inspected on behalf of the University will be supplied by the Registrar on application.

### REFECTORY

For the convenience of students, dinners are served daily in the University Refectory, from 12.30 to 2 p.m. Cold meats may also be obtained after the latter hour; tea, coffee, and other light refreshments up to 6 p.m. The Refectory is closed on Saturdays at 2 p.m.

Term tickets may be had on application to the Registrar, entitling students to dine at the Refectory, College Road, daily (except Saturdays) during the session. The cost of such tickets, which must be prepaid, is £6 10s. per session or £2 10s. per term for the first and second terms, and £3 5s. for the third term for men students, and £5 10s. per session or £2 5s. per term for the first and second terms, and £2 for the third term for women students.

## UNIVERSITY LIBRARY

Honorary Librarian: Professor CLAPHAM Librarian: Miss Fanny J. Passavant Assistant: Miss Florence M. Ekins

The Library is open (a) daily during Term and the months of July and September from 9 a.m. to 5.30 p.m. (on Saturday from 9 a.m. to 12.45 p.m.); (b) during the second half of August and during the Christmas and Easter vacations from 10 a.m. to 1 p.m.

It is closed during the first half of August, one week at Christmas, Good Friday, and the following Saturday, Monday, and Tuesday, and Whit-Monday and Tuesday.

# General Regulations

1. No book shall be removed from the Library unless the borrower shall have first filled in the form provided and handed it to a member of the Library staff.

2. No mark of any kind may be made in the Library books or peri-Any loss of, or injury to, a book shall be reported by the Librarian to the Library Committee, who shall require the person responsible to pay a sum not exceeding that which will be required to make the loss or injury good.

3. The Honorary Librarian has power to suspend the Library privi-

leges of any person who breaks the rules of the Library.

4. No atlases, dictionaries, or other books with special labels shall be taken out of the Library, except in so far as provided in subsequent paragraphs.

- 5. No person shall be allowed to take a book out of the Library if he has in his possession any book which he has kept beyond the time allowed by the regulations, or if any fine or charge which he has incurred has not been paid.
- 6. Persons not members of the University who are engaged in special studies may be given the right to use the Library by the Honorary Librarian.
- 7. The Honorary Librarian shall be at liberty to grant special facilities for the use of books during a limited time to any person entitled to the use of the Library.

## Regulations affecting Members of the Academic Staff

- 8. Any member of the Academic Staff shall be entitled to take out such books as he requires and to retain them until the end of term. unless he receives a notice that any of these books are overdue, in which case such book or books shall be returned without delay to the Library. A book shall be regarded as overdue when it has been in the possession of the borrower for a fortnight and is required by some other person.
- 9. A book which is not overdue according to Rule 8 may be renewed for the vacation on application in writing to the Librarian.
- 10. All books must be brought back to the Library at the end of the third term, but books not required by any other person may be renewed on presentation.
- 11. Current University Calendars and current serials may be taken out of the Library for one night only, and not before 5 p.m. Other unbound serials may be taken out of the Library for a period not exceeding 48 hours.

## Regulations affecting present and past Students of the University

12. All graduates of the University and Associates of the Yorkshire College are entitled to the free use of the Library.

13. All registered students who have paid the registration and Library fee, or the sessional fee, are entitled to the use of the Library so long as they are in attendance upon the day classes in the University.

14. All other students, all evening students, and all past students who are not graduates are entitled to the use of the Library on payment of a

fee of 2s. 6d. per session.

15. Not more than three volumes, whether of the same or of different works, may be entered to the same person at one time.

- 16. Every book must be returned to the Library on or before the Saturday in the week following that in which it was taken out. A book may, however, be renewed from week to week until four weeks have elapsed since its first issue, provided that no application for the use of the book by another person has been received in the meantime.
- 17. All books must be brought to the Librarian for renewal, except when an application for renewal has been made and granted on the day before that on which the return of the book falls due. Applications for renewal may be made personally or by post.
  - 18. At the end of each term all books must be returned to the Library.
- 19. Books of reference and books which, owing to their constant use, are temporarily placed on the list of books of reference, may not be removed from the Library (except under Rule 20), until after 5 p.m., and then only on condition that they be returned before 10 o'clock on the following morning.
- 20. Students provided with a written recommendation from a Professor or Lecturer shall be entitled to take out books of reference, but books taken out under this rule must be returned to the Library before the person using them leaves the University buildings.
- 21. Any person borrowing a book under Rule 19 or Rule 20, and failing to return it by the time therein specified, shall be fined 2d, a day, and any person who does not comply with Rule 16, shall be fined 1d, a day for every day a book is kept out after it ought to have been returned. A notice shall be posted to the borrower on the business day following that on which the return of the book was due, informing him that a fine is being incurred.
- 22. Students desiring to borrow books for the vacation are required to procure a recommendation signed by a Professor or Lecturer of the University. Printed forms for this purpose may be obtained from the Librarian.

### CECIL DUNCOMBE OBSERVATORY

Curator: A. R. DWERRYHOUSE, D.Sc.

The Cecil Duncombe Observatory was opened on May 4th, 1906, by Dr. H. H. Turner, Savilian Professor of Astronomy in the University of Oxford. It is built on a site in Woodhouse Moor contributed by the Leeds City Council. The telescope, an 184 inch reflector of the Newtonian type, was given to the University by Major Duncombe, of Nawton Grange, and formerly belonged to his father, the late Hon. Cecil Duncombe. Its large mirror, made by Mr. G. Carver, of Walpole, Sussex, for Dr. Common, was the first successful large glass mirror made in England. In addition to the large equatorial there are a 3 mch transit instrument and a sidercal clock.

The Observatory is administered by a Committee representing the University, the Leeds Astronomical Society, and the Leeds City Council.

# Regulations

- 1. The Observatory and instruments shall be under the control of the Curator, and no person shall be allowed to go into the Observatory or to use the instruments unless he is present, except as provided for in Rule 6.
- 2. The Curator will attend at the Observatory, on an average, two nights per week during the session of the University, when persons eligible under Rule 4 may attend. All arrangements as to classes and observing nights must be made with the Curator.
- 3. Not more than twelve persons shall be admitted to the Observatory at any one time.
- 4. The following will be allowed to use the Observatory under Rule 2:

(a) Members of the University staff;

(b) Students of the University, on the recommendation of heads of departments;

(e) Members of Astronomical Societies;

- (d) Teachers in the schools of the Leeds Education Committee, in groups of not more than six persons;
- (e) Senior scholars from schools of the Leeds Education Committee, if accompanied by a teacher, who should, if possible, be one interested in the subject;
- (f) Teachers in Leeds schools other than those of the Leeds Education Committee, by special arrangement with the Curator;
- (g) Such other persons as the Observatory Committee may from time to time determine.
- 5. Persons wishing to use the Observatory under Rule 4, sections (d) and (e), must apply for a recommendation to the Leeds Education Committee.
- 6. Permission to use the Observatory for research work in the absence of the Curator may be granted by the Observatory Committee (1) to Professors and Lecturers of the University teaching Physical Geography or Surveying, who may, subject to Rule 3, use the Observatory for class purposes, (2) to such persons as may be specially recommended by the Committee of an Astronomical Society as competent to use the instruments, it being understood that the permission will apply to the authorised person only, who may not admit any other person, and (3) to other persons approved by the Observatory Committee.
- 7. A list of persons authorised to use the Observatory under Rule 6 shall be supplied to the hall porter at the University, who will issue a key of the Observatory to the authorised observer on personal application.

The key must be returned immediately on leaving the Observatory, or before noon on the day following.

- 8. Permission to use the Observatory under Rule 6 may be withdrawn by the Committee at any time; and the Observatory will only be available under that rule when it is not required for class purposes.
- 9. Persons using the instruments under Rule 6 shall be held responsible for their proper use during the time they or their students may occupy the Observatory, and shall be liable to make good any damage they or any of them may do to the instruments.

They will also be responsible for the safe closing and locking of the

building on leaving it.

- 10. A book shall be kept in the Observatory in which all persons using the instruments will be expected to enter their names, with the hours during which they have been present, and the nature of the work upon which they have been employed.
- 11. The Curator is empowered to refuse admission to any person, or to require him to withdraw from the Observatory, without giving any reason to the person concerned; but any such action shall be reported to the Committee at its next meeting.

#### MATRICULATION EXAMINATION

All communications relating to this examination should be addressed to "The Secretary, Joint Matriculation Board, Owens College, Manchester."

For particulars of the Matriculation examination in the Faculty of Medicine, see page 307.

The Matriculation examination is conducted by a Joint Board representing the Victoria University of Manchester, the University of Liverpool, the University of Leeds, and the University of Sheffield. Candidates for degrees in any one of these Universities are required to have passed this examination, or to have obtained a certificate of exemption therefrom, before beginning a degree course. The examination is held in July and September of each year in the buildings of each University. The July examination is held at such other centres as the Board may authorise, and it is also held at schools as a form examination. Information as to the conditions may be obtained from the Secretary to the Joint Board.

Candidates must apply to the Secretary of the Joint Board for a form of entry, which must be forwarded to the Secretary on or before May 30 or August 29 respectively, accompanied by the proper fee. The fee for the examination is  $\pounds_2$ ; but a candidate who has failed in the July examination in any year will be admitted to the September examination in the same year for a fee of  $\pounds_1$  10s. Cheques and postal and money orders should be made payable to the Secretary of the Joint Matriculation Board, and crossed "Williams Deacon's Bank, Ltd., Chorlton-on-Medlock Branch."

The names of candidates who have passed the Matriculation examination are published in two divisions, the names in each division being arranged in alphabetical order.

The Board of Education accepts the Matriculation certificate under certain conditions for the purpose of admission to Training Colleges under Article 115 (d) of the code (see page 51), and of recognition as Assistant Teachers under 51 (b).

Women candidates who have passed the examination and taken two languages are eligible for the Honours examinations at Oxford.

Provided Latin be one of the subjects taken, the certificate is accepted by the Law Society in lieu of the Preliminary examination. Provided Mechanics and a second science subject be taken, the certificate is accepted by the Institution of Civil Engineers in lieu of the Studentship examination.

Provided certain conditions (for which see syllabus) are complied with, the certificate is accepted by the Universities of Oxford and Cambridge in lieu of the examination at Responsions and the Previous examination respectively.

## Subjects of Examination

Candidates presenting themselves for the Matriculation examination are required to satisfy the Examiners in:

- 1. English Language or Literature, and English History
- 2. Mathematics
- 3. Three of the following, one of which must be a language
  - i. Greek
  - ii. Latın
  - iii French
  - iv. German
  - v. Some other Language approved by the Board<sup>1</sup>
  - vi. Elementary Mechanics
  - vii. Chemistry
  - viii. Geography or Natural History.

# Details of Subjects

ENGLISH LANGUAGE, LITERATURE, AND HISTORY:

An essay in Fighsh language and an essay in English literature. Elements of English grammar, including outlines of the general history of the English language. A set book or books in English literature. Outlines of English history.

## MATHEMATICS:

Arithmetic. The elementary geometry of triangles, parallelograms, and circles, and of similar rectilinear figures. <sup>2</sup> Algebra to quadratic equations (inclusive), with the arithmetical and geometrical progressions and an elementary treatment of irrational quantities and of proportion.

<sup>1</sup> Application for permission to present this must be made to the Secretary, Joint Matriculation Board, Owens College, Manchester, and the fee must be paid on or before March 1st of the year in question.

These subjects are covered by Euclid i, ii, iii, and vi. (1-19 and 33.)

GREEK :1

Either one prose and one verse book or passages from unprepared books, with grammar questions in each case. Grammar. Translation at sight of easy Greek passages into English.

LATIN:

Either one prose and one verse book or passages from unprepared books, with grammar questions in each case. Grammar. Translation at sight of easy Latin passages into English. Translation of an easy passage of English prose into Latin.

FRENCH:

Grammar (the questions in grammar will not involve more than accidence and elementary syntax). Translation from two prescribed French books or passages from unprepared books, with grammar questions in each case. Translation at sight of easy French prose into English. Translation of English passages into French.

GERMAN:1

Grammar (the questions in grammar will not involve more than accidence and elementary syntax). Translation from two prescribed German books or passages from unprepared books, with grammar questions in each case Translation at sight of easy German prose into English. Translation of English sentences into German.

OTHER LANGUAGES2: details as for French and German.

ELEMENTARY MECHANICS:

The elementary portions of statics, kinetics, and of the properties of liquids and gases, including: Laws of motion. Uniform acceleration. Composition and resolution of forces in one plane. Moments of forces. Work and energy. Centre of gravity. Uniform circular motion. Simple pendulum. Direct impact. Fluid pressure. Specific gravity. Boyle's Law.

ELEMENTARY CHEMISTRY:

General properties of matter. Chemical combination and decomposition and the laws governing them. Preparation, classification, and chemical behaviour of the chief elements and their compounds, especially of the non-metals. The outlines of chemical theory.

Candidates will be expected to show by their answers that they have seen experiments illustrative of all the subjects included in this syllabus, and that they have themselves performed a variety of simple qualitative and quantitative experiments.

GEOGRAPHY (Physical, Political, and Commercial):

(a) Distribution of land and water. Land-forms and agencies modifying them. Distribution of temperature, winds, rainfall, vegetation and animal life. Human occupations and activities (agricultural, industrial, and commercial) as determined by these physical conditions.

1 Candidates, in order to pass, must satisfy the Examiners in translation at sight and grammar.

<sup>&</sup>lt;sup>2</sup> Application for permission to present this must be made to the Secretary, Joint Matriculation Board, Owe , College, Manchester, and the fee must be paid on or before March 1st of the year in question.

(b) The following regions to be studied so as to illustrate the subjects stated in section a.

(1) The British Isles (with outlines of the historical geography in addition).

- (2) A special region or regions<sup>1</sup> (to be specified yearly) in less detail.
- (3) The rest of the World on broad lines only.
- (c) Candidates will be expected to be able to read an ordnance map.

  NATURAL HISTORY:
  - A.—Botany: 1. The structure and mode of life of plants.
    - (a) The elementary facts of the nutrition of green plants as shown by simple experiments.

(b) The form and function of roots, stems, and leaves.

- (c) The modifications of the vegetative organs in common British examples of water-plants, heath-plants, plants inhabiting dry places, climbing plants, insectivorous plants, and parasites.
- (d) The structure and function of a typical flower.
- (e) Modes of pollination of common flowers.

(f) Modes of dispersal of seeds and fruits.

- (g) The structure of a seed and its mode of germination as seen in the maize, the bean, the melon, and other common seeds.
- (h) Vegetative reproduction of plants by bulbs, by tubers, and in other ways.
- 2. The classification of plants. The general characters of the following British natural orders: Liliaceæ, Gramineæ, Ranunculaceæ, Cruciferæ, Leguminosæ, Rosaceæ, Primulaceæ, Labiatæ, Compositæ, Umbelliferæ, Cupuliferæ.

#### B. - Zoology

- (a) The general structure of a mammal; knowledge of the chief features of the skeleton is expected.
- (b) The external form, mode of life and habits of the bat, cat, dog, sheep, horse, kangaroo, and whale.
- (c) The wing, feathers, beak, and foot of a bird. The flight of birds
- (d) The nests and eggs of birds, as exemplified by two or three common British species. A fowl's egg. The place of formation of a chick; its nutrition and respiration while in the egg.
- (e) The general structure and life-history of a frog.
- (f) The general structure and mode of life of a fish.
- (g) The external features and mode of life of a snail, a cockroach, and an earth-worm.
- (h) The life-history of either a moth or butterfly, and of a pond snail.

<sup>1</sup> The regions selected for 1908 are: The Mediterranean Area and India.

(i) One of the following groups:

- (Marine animals). The general structure, mode of life, and life-history of a sea-anemone, a reef-forming coral, an oyster or edible mussel, a crab, a star-fish or seaurchin.
- ii. (Inland animals). The general structure, mode of life, and life-history of hydra, a pond-mussel, a crayfish, chironomus ('blood-worm,' 'harlequin-fly'), and a spider.

## Books prescribed for 1908

GREEK, one book from each of (a) and (b):

(a) Nenophon, Anabasis n, or Plato, Apology.

(b) Euripides, Alacetes (omitting lines 77-135, 213-279, 569-605, 861-932), or Homer, Anal (lines 1-492), and vi

LATIN, one selection from each of (a) and (b):

(a) Caesar, de Beelo Gallico v. er Sallust, Catelina (omitting ec. 52-

(b) Vergil, Aencid ii, or Ovid, Met that phoses xiii.

FRENCH, (a) and one selection from (b):

(a) de Vigny, Cing Mary (Macmillan)

(b) Augier and Sandeau, In Gendre de M. Porrier (Hachette), or V. Hugo, Charx de Po'sus (Hachette).

GERMAN, (a) and one selection from (b):

Esmond.

(a) Richl, Kulturgeschichtliche Novelien, Nos. 1 and 3.

(b) Klee, Die Deutschen Heidensagen, No. 2, or Schiller, German Lyrus and Ballady (selected by Hatfield, Isbister), Nos. 8, 43, 84, and 86.

ENGLISH LITERALURE, one selection from each of (a), (b), and (c):

(a) Shakespeare, Julius Caesar or Shakespeare, Twelfth Night.

(b) Milton, Paradise Lost, books is and v. of Henley, Lyra Hervica.
(c) Cowper's Lettery (Golden Treasury selection) of Thackeray,

# Higher Papers

Alternative papers of a higher standard are set at the July examination in English Literature, English History, Mathematics, Greek, Latin, French, German, Mechanics (including Physics), and Chemistry.

For the award of certain scholarships, the examination will also include an additional paper of three hours in the subject of Mechanical Drawing.

#### Matriculation Calendar

For full information as to the Matriculation examination, including reprint of examination papers, see the Calendar of the Joint Matriculation Board, to be obtained from any local bookseller, price 6d., or post free 8d

A Syllabus containing the complete regulations but without examination papers, is issued free, and is obtainable from "The Secr tary, Joint Matriculation Board, Owens College, Manchester."

## DEGREES IN ARTS

1. The degrees in Arts shall be:

Ordinance

Bachelor of Arts (B.A.)

Master of Arts (M.A.)

Doctor of Letters (Litt.D).

## DEGREE OF BACHELOR OF ARTS

- 2 The degree of Bachelor of Arts shall be conferred either as an Ordinary degree or as a degree with Honours.
- 3. All candidates for the degree of Bachelor of Arts shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

# Ordinary Degree of Bachelor of Arts

- 4. The complete course of study for the Ordinary degree of Bachelor of Arts shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 5. Every candidate shall be required to pass two examinations, the Intermediate and the Final
- 6. The Intermediate and Final examinations shall ordinarily be held in June of each year.<sup>2</sup> There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
- 7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following Supplementary examination, may be excused such part of the Supplementary examination as the combined examination committees, on report from the separate examination committee concerned, may determine.
- 8. Candidates who have failed at a Final examination may present at the June examination of the following year those books and periods in which they have already been examined.

<sup>1</sup> It is not necessary to have passed in Latin as one of the subjects at the Matriculation examination, but a student cannot enter upon an Arts course without some knowledge of Latin.

<sup>2</sup> In 1908 they will begin on Wednesday. June 10. The latest day for entry will be MONDAY, MARCH 2, and the latest day for payment of fee Friday, May 1.

9. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

### Intermediate Course and Examination

- 10. Every candidate shall be required, after passing the Matriculation examination, to attend during one academic year approved courses of study in five subjects, and to pass in each of the subjects selected, viz.:
- i, ii. Two languages from the following list: Greek; Latin; French; German; one of which must be Greek or Latin.
- iii. Either (a) English Literature; or (b) History (Ancient or Modern)
- iv. Either (a) Logic; or (b) Mathematics; or (c) one of the following Natural Sciences: Physics, Chemistry, Geology.
- v. English Language or any subject under i, ii, iii, iv not already selected, provided that no candidate may take (a) both Ancient and Modern History; (b) two Natural Sciences.

The examination in each modern language shall include an oral examination.

# Regulations

Detailed subjects of study and of examination.

#### GREEK:

Prose composition. Translation at sight from Greek into English.

Prescribed books: portions from two authors, one prose and one verse, to be studied in their literary and linguistic aspects.

Books for 1908: Herodotus ix, cc. 1-89; Euripides, Rhesus.

Books for 1909: Thucydides iv; Homer, Odyssey v, vi.

#### LATIN:

Prose composition. Translation at sight from Latin into English.

Prescribed books: portions from two authors, one prose and one verse, to be studied in their literary and linguistic aspects.

Books for 1908: Livy xxi; Virgil, Georgics iv and Aeneid vi.

Books for 1909: 'icero, pro Roscio Amerino; Virgil, Aeneid i, iv.

#### FRENCH:

Prose composition. Syntax of the French language. Translation at sight from French into English. Prescribed books: at least two texts, including both prose and verse, to be studied in their literary and linguistic aspects. Dictation, reading aloud and conversation in French.

Books for 1908: Vigny, Selected Poems (Morse, Le Déluge, Le Cor); Balzac, César Birotteau.

Books for 1909: (a) Alfred de Musset, Poésies Choisies (Clarendon Press, 1906, 2/-) i.e., Ballade à la lune, Nuit de Décembre, Lettre à Lamartine, Dupont et Purand; (b) Madame de Girardin, Choix de Lettres Parisiennes (Clarendon Press, 1906, 2/6), Lettres i-xx, pp. 1-98.

#### GERMAN:

Prose composition. Syntax of the German language. Translation at sight from German into English. Prescribed books: two texts, one prose and one verse, to be studied in their literary and linguistic aspects. Dictation, reading aloud, and conversation in German.

Books for 1908: Lessing, Minna von Barnhelm; Schiller, Selected Ballads (Ring des Polykrates, Kraniche des Ibykus, Burgschaft, Taucher, Handschuh.

Books for 1909: Scheffel, Ekkehard, ed. Hager (Whittaker), pp. 1-63: Goethe, Ballads (in Goethe's Poems, ed. Atkins and Kastner, Blackie & Son).

### ENGLISH LITERATURE:

A period of English Literature. Books prescribed for special study.

Period for 1908; 1785-1830 A.D.

Books for 1908: Chaucer, Prologue to Canteroury Tales; Shakespeare, Romeo and Juliet; Wordsworth and Coleridge, Lyrical Ballads with prefaces and appendix; Palgrave, Golden Treasury, book iv; Shelley, Adonais; Byron, Childe Harold, book iii, and Manfred; Scott, Heart of Mullothian.

Period for 1909: 1557-1616 A.D.

Books for 1909: Chaucer, Prologue to Canterbucy Tales; Palgiave, Golden Treasury, book i; Marlowe, Tamburlaine, part i; Shakespeare, Romeo and Juliet, Twelfth Night; Spenser, Faerie Queene, book i; Sidney, Afology for Poetry; Bacon, Advancement of Learning, book i.

### ENGLISH LANGUAGE:

History of the English Language. Old and Middle English prose; books and passages selected from works before the close of the Fourteenth Century.

Books for 1908: Sweet, Anglo-Savon Primer and Anglo-Saxon Reader, extracts ii, iv, x, xv; Morris and Skeat, Specimens of Early English, vol. i, extract xix (King Horn); Chaucer, Prologue to Canterbury Tales.

Books for 1909: As in 1908.

## ANCIENT HISTORY:

Introduction to Ancient History, with special reference to selected periods of Greek and Roman History.

Periods for 1908 and 1909: Greek History, 490-399 B.C.; Roman History, 134-44 B.C.

## MODERN HISTORY:

A selected period of Modern History.

Period for 1908: Modern European History from 1763.

#### Logic:

The elements of Deductive and Inductive Logic.

#### MATHEMATICS:

Trigonometry to the solution of triangles. The first principles of Analytical Geometry and the elements of the Differential Calculus, as applied to the tracing of graphs and the determination of maxima and minima ordinates. The Algebra required for the above subjects.

#### PHYSICS:

The properties of matter, the chief phenomena of Sound, Heat, Light, Electricity and Magnetism, treated in an elementary manner; Practical Physics.

#### CHEMISTRY:

The general principles of Inorganic Chemistry and then application; the elements of Organic Chemistry; Practical Chemistry.

#### GEOLOGY:

General Physical and Stratigraphical Geology, and Geology in relation to the study of Geography.

### Final Course and Examination<sup>1</sup>

Ordinance.

- 11. Every candidate shall be required to attend approved courses of study in three principal subjects and one subsidiary subject, and to pass in each of the subjects selected. The same subject may not be taken both as a principal and as a subsidiary subject. An essay paper shall be set for all candidates at the Final examination.
- 12. The course of study in each principal subject shall extend over two academic years, and the course of study in the subsidiary subject shall extend over one academic year.
- 13. The principal subjects shall be selected from the following list: Greek, Latin, French, German, English Language and Literature, History, Philosophy, Economics,

<sup>1</sup> In certain cases, students who began their course for the degree under the scheme previously in force may obt 'n permission to present themselves for the Final examination according to the regulations appearing in the Calendar for 1904-5.

Education, Pure and Applied Mathematics. Every candidate shall be required to take as a principal subject one of the following: Greek, Latin, French, German. The examination in each modern language shall include an oral examination.

- 14. The subsidiary subjects shall be selected from the following list: English Literature, History, Philosophy, Economics, Education, Pure Mathematics, Applied Mathematics. The course of study in a subsidiary subject may be taken either in the first or second year of the Final course.
- 15. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in June of that year for examination in such subsidiary subject. Part of the examination in Education, to be defined by Regulation, may also be taken at the end of the first year of the Final course.

# Detailed subjects of study and of examination,

Regulations

## 1. Principal Subjects, studied for Two Years.

#### GREEK:

Prose composition. Translation at sight from Greek into English. The study of portions from various authors, three of which (two prose and one verse or one prose and two verse) will be prescribed as subjects of the Final examination.

Books for 1908: Plato, Republic 1 and ii; Homer, Iliad xviii; Aristophanes, Freev.

Books for 1909: Thucydides i; Sophocles, Antigone; Homer, Odyskey xxiii, xxiv.

#### LATIN:

Prose composition. Translation at sight from Latin into English. The study of portions from various authors, three of which (two prose and one verse or one prose and two verse) will be prescribed as subjects of the Final examination.

Books for 1908; Tacitus, Annaly II; Horace, Odev ii, iii; Juvenal iii, iv, v, x, xiv.

Books for 1909: Tacitus, *Histories* iii; Horace, *Efistles* 1; *Lucretius* iii.

#### FRENCH:

The study of various texts, three of which (two prose and one verse, or one prose and two verse) will be prescribed as subjects of the Final examination. Translation at sight from French into English. Principles of Phonetics, and Principles of Historical Grammar. Composition and the study of style. A period or periods of French Literature. Dictation, reading aloud and conversation in French.

- Books for 1908: (a) Victor Hugo, Notre Dame; (b) Corneille, Polyeucte; Racine, Athalie.
- Books for 1909: (a) Corneille, Polyeute; Racine, Athalie; (b) Rousseau, Lettre sur les Spectacles (Hachette, 1/3), ed. Brunel.
- Recommended for reading: Rousseau, Extraits on Prose (Hachette, 1/8), ed. Brunel.
- Periods for 1908: (a) The French Novel from 1820 to 1850; (b) The French Tragedy in the 17th Century.
- Periods for 1909: (a) French Tragedy in the 17th Century; (b) Rousseau and the Romantic Revival.

#### GERMAN:

- The study of various texts, three of which (two prose and one verse, or one prose and two verse) will be prescribed as subjects of the Final examination. Translation at sight from German into English. Principles of Phonetics and Principles of Historical Grammar. Composition and the study of style. A period or periods of German Literature. Dictation, reading aloud and conversation in German.
- Books for 1908: Goethe, Egmont, Alexis und Pora; Lessing, Hamburgische Pramaturgie (ed. Lyon, Velhagen & Klasing), pp. 1-80; Schiller, Spaziergang
- Books for 1909: Schiller, Wilhelm Tell, Spaziergang; Lessing, Hamburgische Dramaturgie (ed. Lyon, Velhagen & Klasing), pp. 1-80; Goethe, Alexis und Dora.
- Periods for 1908: Lessing's Life and Works; Goethe's Life and Works.
- Periods for 1909: Lessing's Life and Works; Schiller's Life and Works.

#### ENGLISH LANGUAGE AND LITERATURE:

# English Language

- First Year Course. The elements of Old English, with prescribed books in Old English prose and unseen translation.
- Books for 1908: Sweet, Anglo-Saxon Primer; Chaucer, Nun's Priest's Tale.
- Books for 1909: Sweet, Anglo-Saxon Primer; Chaucer, Man of Law's Tale.
- Second Year Course. A more advanced study of Old and Middle English, with prescribed books (prose and verse) and unseen translation.
- Books for 1908: Sweet, Anglo-Saxon Reader, extracts x, xv, xxii; Chaucer, Nun's Priest's Tale.
- Books for 1909: Sweet, Anglo-Saxon Reader, extracts vi, vii, viii, ix, x, xxvi; Chaucer, Clerk's Tale.
- Candidates may, with the consent of the Board of the Faculty of Arts, be permitted to substitute a further study of English Literature for the "bove course in English Language."

## English Literature

In each year the study of a selected period of English Literature, with a knowledge of prescribed books and questions of literary history and criticism arising from them.

Period for 1908: 1785-1850 A.D.

Books for 1908: Chaucer, Man of Law's Tale; Shakespeare, Twelfth Night; Palgrave, Golden Treasury, book iv; Wordsworth and Coleridge, Lyrical Ballads, with prefaces and appendix; Wordsworth, Michael, Story of Margaret (from Excursion, book i); Shelley, Idonais, Defence of Poetry; Keats, Hyperion; Lamb, Essays of Elia; Tennyson, Mand; Browning, Selected Poems (pub. Smith, Elder).

Period for 1909: 1557-1637 A.D.

Books for 1909: Chaucer, Man of Law's Tale; Palgrave, Golden Treasury, book i; Marlowe, Edward II.; Sidney, Apology for Poetry; Shakespeare, Much Adv about Nothing, King Lear; Spenser, Shepherd's Calender; Hooker, Ecclesiastical Polity, book i; Jonson, Lyrics, Discoveries; Ford, The Broken Heart.

#### HISTORY:

First Year Course: A general sketch of European History from the third century A.D.

Second Year Course: Two prescribed periods of History, studied in connection with some of the original authorities and selected from the following: Greek, Roman, English, Constitutional, European, Economic History.

Periods for 1908: Greek History, 445-399 B.C.; Roman History to 134 B.C.; English History, 1529-1603 A.D.; European History, 1226-1314 A.D.

Periods for 1909: Greek History, 510-434 B.C.; Roman History, 134-44 B.C.; English History, 1625-1702; European History, 1226-1314.

Periods for 1910: Greek History, 510-434 B.C.; Roman History, 31 B.C.-180 A.D.; English History, 1760-1815; European History, 1789-1815.

#### **Рип озориу**:

Two of the following:

History of Ancient Philosophy: general outlines of Greek Philosophy, with the special study of selected works.

History of Modern Philosophy: general outlines of Modern Philosophy from Bacon to Kant, with the special study of selected works.

Psychology: systematic Psychology, with more detailed study of some part of the subject.

Ethics: the general principles of Ethics, with the special study of selected ethical systems.

Theory of Knowledge: general outlines with the special study of selected works.

Books for 1908: Ancient Philosophy, Plato, *The Republic*; Modern Philosophy, Locke, *Escap concerning Human Understanding*, books 1, 11, iii, cc. 3, 6, iv, cc. 1-11.

#### Economics:

First Year Course: General principles of Economics, together with the outlines of recent economic history.

Second Year Course: More advanced treatment of economic principles, with description of industrial and commercial organisation.

### EDUCATION:

The course extends over three years, and is divided into two parts: Part I., Theory of Education, extending over two years, with an examination at the end of the second year; and Part II., History of Education, extending over one year. Candidates presenting themselves for examination in Part II. must present their other principal subjects at the same examination. Candidates ordinarily attend the courses of instruction in Part I. during the year of their attendance on the Intermediate Course for the degree, and the first year of their attendance on the Final Course.

### Part I. Theory of Education.

Functions and agents of Education. The otheral, logical, and psychological bases of mental and moral Fducation. The general principles of teaching, with application to the primary school curriculum. The general principles of discipline, with applications to school lite. School organisation. The general principles of physical training with reference to the work of the school; school livgiene.

#### Part II. History of Education.

General ontline of the history of educational thought in Europe from the Renascence to the present time, with special reference to England and special emphasis on the Nincteenth Century. A prescribed book. The book prescribed for 1908 and 1909 is Plato, *Republic*, in, in, iv.

### MATHEMATICS:

#### Pure Mathematics:

Analytical Geometry, up to but not including the general equation of the second degree. The more elementary portions of the Differential and Integral Calculus.

#### Applied Mathematics:

Statics and Dynamics as far as they can be taken without the Integral Calculus. Hydrostatics.

II. Subsidiary Subjects, studied for One Year.

#### ENGLISH LITERATURE:

A selected period of English Literature, with a knowledge of prescribed books and questions of literary history and criticism arising thereon.

Period and books for 1908 and 1909: The same as for English Literature as a pri. sipal subject.

#### HISTORY:

General sketch of European History since the Roman Empire.

#### PHILOSOPHY:

One of the subjects prescribed for Philosophy, taken as a principal subject.

### Economics:

General principles of Economics, together with the outlines of recent economic history.

#### Education:

Part I, of the course prescribed for Education taken as a principal subject.

#### PURE MATHEMATICS:

Analytical Geometry up to but not including the general equation of the second degree. The more elementary portions of the Differential and Integral Calculus.

### APPLIED MATHEMATICS:

Statics and Dynamics as far as they can be taken without the Integral Calculus. Hydrostatics.

# Degree of Bachelor of Arts with Honours

1. Candidates for the degree of Bachelor of Arts with Ordinance Honours shall, except as hereinafter stated, be required to furnish certificates of having attended courses of instruction approved by the University and extending over not less than three academic years in one of the Honours Schools of the University hereafter enumerated.

- 2. Every candidate for the degree of Bachelor of Arts with Honours shall be required to present himself for examination at the end of the third or fourth academic year from the time when he has entered upon one of the courses of instruction approved by the University for such degree, unless he shall present a medical certificate of illness satisfactory to the Schate. This examination shall ordinarily be held in June of each year.1
- 3. Candidates for the degree of Bachelor of Arts with Honours may present themselves for examination in any of the following Honours Schools on furnishing certificates of

<sup>1</sup> In 1908 it will begin on Wednesday, June 10. The latest day for entry will be MONDAY, MARCH 2, and the latest day for payment of fee Friday, May 1.

having pursued, to the satisfaction of the Senate, the courses required for such Honours Schools in the University, viz.:

Classics

English Language and Literature Modern Languages and Literatures

History

Philosophy

Economic and Political Science

- 4. Candidates who have passed the Final examination for an Ordinary degree of Bachelor of Arts may, with the sanction of the Senate and on furnishing certificates of having attended, during the academic year following such Final examination for the Ordinary degree, the third year's, or, during the two academical years following such Final examination, the second and third years' courses approved by the University for any one of its Honours Schools, present themselves for examination for the degree of Bachelor of Arts with Honours in such School.
- 5. No candidate for a degree of Bachelor of Arts with Honours shall be admitted more than once to examination in the same Honours School; but students who have passed the Final examination in any of the Honours Schools may be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University.

Provided that in the said other Honours School selected, candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

6. Names of candidates who have passed the examination for the degree of Bachelor of Arts with Honours shall be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.

7. Candidates who have not acquitted themselves so as to deserve Honours may be excused the whole or such part of the examinations for the Ordinary degree as the joint examination committee may determine.

### Classics

Candidates for the degree of Bachelor of Arts with Regulations. Honours in Classics shall be required to pursue courses of study and to submit themselves for examination in the following subjects:

Translation from prescribed Greek and Latin books.

Translation at sight from Greek and Latin authors.

Greek and Latin Composition.

Greek and Latin Literature.

Two of the following:

Ancient History

Ancient Philosophy

A special subject connected with Greek or Latin literature

Attendance in the subjects of the school shall be required as follows: Not less than twelve hours a week in the first and second years, and ten hours a week in the third year. Attendance on the full course for the Intermediate examination for the Ordinary degree of Bachelor of Arts may be accepted as the required attendance for the first year of the Honours course, provided that the subjects chosen by the candidate are substantially and to the satisfaction of the Board of the Faculty of Arts those required for the first year's course of the Honours School of Classies.

#### Examination

Greek Prose Composition, one paper.

Latin Prose Composition, one paper.

Greek Unprepared Translation, one paper.

Latin Unprepared Translation, one paper.

Translation from prescribed Greek books, with questions on grammar and subject matter, two papers.

Translation from prescribed Latin books, with questions on grammar and subject matter, two papers.

Critical and Essay paper.

Two of the following:

Ancient History, one paper.

Ancient Philosophy, one paper.

Special subject in Greek or Latin Literature, one paper.

Greek and Latin Verse Composition, one paper (optional).

## Books for 1908:

GREEK: Homer, Iliad xxii, xxiii, xxiv, Odysser ix, x, xi, xii; Aeschylus, Perwe, \*Eumenider: Sophocles, Afax, \*Antigone; Euripides, Bacchae, Heriules Furens; Aristophanes, Clouds, \*Frogs: Herodotus ii, \*vi; Thucydides vi, \*vii; Plato, Republic i, ii, iii, iv: Demosthenes, \*De Corona; Dionysius Halicainassensis, De Compositione Verborum.

## Books for 1909:

Homer, Iliad xxii, xxiii, xxiv, Odywey ix, x, xi, xii; Pindar, Olympian Odes; Aeschylus, Persa, \*Agamemnon; Sophocles, \*Antigone, Philotetes; Euripides, Ilippolytus, Bacchae; Aristophanes, \*Acharmans, Cleuds; Herodotus, \*ii, vi; Thucydides, \*i, vi; Plato, Republica, ii, iii, iv; Demosthenes, \*De Corona; Dronysius Halicainussensis, De Compositione Verborum.

## Books for 1908 and 1909:

LATIN: Plantus, Captin, Trinummus; Catullus (Simpson's selection); Lucretius 'm, v; Viigil, Georgies, Aeneid, i, "ii, iii, iv; Horace, Odes i, ii, "iii, iv and "attres; Livy xxi, xxn; Cicero, pro Roscio Amerino, "Second Philippia, Letters (Watson's selection, part v); Tacitus, Annals '1, ii, Agricola; Juvenal, Satires i, "ni, "iv, v, "x, xi, xiv.

# English Language and Literature

In this School there shall be alternative schemes of study: Scheme A, in which special attention will be paid to language; and Scheme B, in which special attention will be paid to literature. Under both schemes a competent knowledge of one classical and of at least one modern language shall be required for the attainment of high Honours.

Honours students, under either scheme, will, as a rule, be expected to take the Intermediate B.A. examination at the end of their first year, including the English Language as one of their subjects.

Candidates who have not taken English Language in their Intermediate examination may be permitted to enter for the Honours examination at the end of their third year, on condition that (i) they take Scheme B; (ii) that, before entering

<sup>\*</sup>The books marked with an asterisk are to be studied with special care in all their bearings, textual, grammatical, literary, historical, etc.

on their second year course, they satisfy the head of the Department that they possess a sufficient knowledge of the English Language to enable them to profit by the subsequent courses in that subject.

### Scheme A

Candidates shall be required to attend the following courses in the subjects of the School: during three academic years courses in English Language, including the History of the Language, Early English prose and verse, and Gothic, such courses amounting to not less than three hours a week for the first year and not less than four hours a week for the second and third years.

Candidates shall be also required

- (1) either (a) to attend approved courses in two of the following languages: Old Icelandic, Old High German, Old French;  $\sigma r(b)$  to present a dissertation in a subject approved by the Board of the Faculty of Arts;
- (2) to attend for two years approved courses of two hours a week in History, English or European; for two years approved courses in French or German; and for a third year an approved course in the History of the French Language and Literature, or in the History of the German Language and Literature. They are further required to attend, during the first year, an approved course in Latin or Greek.

### Examination

Essay, one paper.

Translation of unseen passages of Old and Middle English, with literary and linguistic questions, one paper

Prescribed books in Old and Middle English, with literary and linguistic questions, one paper.

Outlines of English Literature, with prescribed books, one paper. Grammar of Old and Middle English dislects, with illustrative passages for translation or comment, two papers

History of English, with reference to general principles of linguistic development, one paper.

Gothic, one paper.

Either two of the following: Old Icelandic, one paper; Old High German, one paper; Old French, one paper;  $\partial r$  a dissertation on a subject approved by the Board of the Faculty of Arts.

Oral examination

Books in Old and Middle English for 1908:

Sweet's Reader, Extracts xxii, xxx, xxvi; Evodus; Beowulf, vv. 2223 to end; The Address of the Soul to the Body; Ancren Rivele (Sweet's Extracts); Sir Gawayne and the Green Knight; Chaucer, Clerk's Tale.

Books in Old and Middle English for 1909:

Anglo-Saxon Chronicle, Reigns of Alfred and Edward the Elder; Sweet's Reader, Extracts ii, iv, v, ix, x, xvi; Beowulf, either vv. 1-1651 or 2223 to end; Andreas; Morris and Skeat, Specimens of Early English, part i, vi, x, xvii, xviii; Chaucer, Knight's Tale.

Outlines of English Literature: Prescribed Books as in M.A. (1909). (See pages 162-3).

Scheme B

Candidates shall be required to attend the following courses in the subjects of the School: in the first year, three hours a week in English Literature, and three hours a week in English Language; in the second year, five hours a week in English Language; in the third year, five hours a week in English Literature, and one hour a week in English Language.

Candidates shall be also required to attend, during the first and second years, approved courses in subjects other than English Language and Literature; such courses shall include an approved course in Latin or Greek, and shall average not less than five hours a week in the first year and not less than three hours a week in the second year; and during the third year, a course of two hours a week in some language other than English.

### Examination

Essay, one paper.

Translation of unseen passages of Old and Middle English, with literary and linguistic questions, one paper.

Prescribed books in Old and Middle English, with literary and linguistic questions, one paper.

Outlines of English Literature, one paper.

Special period of English Literature, with prescribed books, two papers.

An English author, or selected subject from English Literature, two papers.

History of Criticism, one paper.

Oral examination

In addition, candidates shall be required to present a dissertation on a subject approved by the Board of the Faculty of Arts.

Books and Period prescribed for 1908:

Old and Middle English: As in Scheme A. (1908).

Special period: 1700-1784.

Books in special period: Addison, Golden Treasury Selections; Steele, Golden Treasury Selections; Pope, Rape of the Lock, Iliad, book i, Epistle to Arbuthnot; Swift, Cadenus and Vanessa, Lines on the Death of Dr. Swift, Gulliver's Travels, Drapier's Letters; Thomson, Winter; Johnson, Rasselas, Lives of Pope, Swift, Gray; Gray, Poems; Collins, Poems; Sterne, Sentimental Journey; Fielding, Joseph Andrews; Sheridan, The Rivals, The Critic; Walpole, Letters (1760-1780); Goldsmith, Poems, Vicar of Wakefield; Burke, Speeches on American War, and Letter to Sheriffs of Bristol.

Books and Period prescribed for 1909:

Old and Middle English as in Scheme A (1909).

Special Period: 1780-1850.

Books in special period: Palgrave. Golden Treasury, book iv; Burns, Selections, ed. Logic Robertson; Wordsworth, Prelude; Wordsworth and Coleridge, Lyrical Ballads of 1798, with Prefaces and Appendix; Shelley, Prometheus Unbound, Adonais, Defence of Poetry; Keats, Poems; Byron, Childe Harold, cantos iii, iv, Manfred; Burke, Appeal from New to Old Whigs; Scott, Waverley, Quentin Durward; Lamb, Essays of Elia; Hazlitt, Spirit of the Age; Austen, Emma; Peacock, Nightmare Albey; Carlyle, Sartor Resartus; Landon, Selections (Golden Treasury); Tennyson, Poems of 1842, Maud; Browning, Paracelsus, Selections (Smith, Elder, 1/-); Ruskin, Modern Painters, vol ii (of Ideas of Beauty); C. Bronte, Jane Eyre.

Special author in 1908 and 1900: Shakespeare, with special study of Richard III, Merchant of Venue, King Lear, Tempest.

#### HISTORY OF CRITICISM:

Special Books suggested for study: Aristotle, Poetics; Horace, Ars Poetica; Dante, De Vulgari Eloquio; du Bellay, Defense et Illusiration de la Langue française; Sidney, Defence of Poesy; Ben Jonson, Discoveries; Dryden, Essay on Dramatu Poetry; Boileau, L'Alt poétique; Lessing, Laocoon and Hamburgische Dramaturgie; Wordsworth, Prefaces and Appendices to Lyrual Ballads; Shelley, Defence of Poetry; Coleridge, Biographia Literaria; Charles Lamb, Literary Criticisms; Hazlitt, Shakspere's Characters; Victor Hugo, Préface de Cromwell; Arnold, Essays in Criticism, Second Series.

# Modern Languages

The languages studied in the School shall be French, German, English.

Candidates for the degree of Bachelor of Arts with Honours in the School of Modern Languages shall be required to pursue courses of study and to submit themselves for examination in the following subjects:

Either (a) French and German, as principal subjects;

- or (b) French, as principal subject, together with German and English as subsidiary subjects;
- or (c) German, as principal subject, together with French and English as subsidiary subjects.

Candidates who enter the School in 1905, 1906 or 1907 may take English as a principal subject, with either French or German as a second principal subject.

Candidates shall also be required to study auxiliary subjects, of which Latin shall ordinarily form part. Exemptions may be granted to specially qualified candidates.

The names of candidates, who, being placed in the First or Second Class, have shown conspicuous merit in a principal subject or principal subjects, shall be distinguished in the class list by some mark to indicate the subject or subjects in which they have shown such merit.

# Principal subjects

# I. FRENCH AND GERMAN:

The course of study and subjects of examination in French or German taken as a principal subject shall be: Prescribed texts of before 1500, studied from a literary and linguistic standpoint; prescribed texts of after 1500, studied in the same way; unprepared translation; literature (outlines and special periods); the history of the language (including phonetics, versification, &c.): composition.

Candidates taking French or German as a principal subject shall be required to attend for at least two years classes in composition, translation and phonetics; for one hour a week for each of three years a class in Literature; for three hours a week for two years, and at least two hours a week for one of the three years classes on the history of the language, and the linguistic and literary study of texts prior to 1500; for one hour a week for two terms in one year a class in French or German Institutions.

#### II. ENGLISH:

The courses of study and subjects of examination in English taken as a principal subject by candidates entering the School in 1905, 1906 or 1907 are as follows:

Language. During the first year, a course on the History of the Language of not less than two hours a week, and a course of translation of not less than one hour a week. During the second year, a course of translation of not less than two hours a week, and a course of Gothic, or of French (if not attended under I), of not less than one hour a week. During the third year, a course of translation of not less than two hours a week, and an advanced course of not less than one hour a week.

Literature. During one year, a course of instruction in English Literature, averaging not less than three hours a week. During two other years, courses of instruction in English Literature, together amounting to an average of not less than four hours a week.

# Subsidiary subjects

#### I. French or German:

The course of study and subjects of examination in French or German taken as a subsidiary subject shall be: The work required for the full course in French or German for the Ordinary degree of B.A; additional modern texts; additional study of literature for one year.

Candidates taking French or German as a subsidiary subject shall be required to attend: for three years the full course in French or German for the Ordinary degree of B.A: for one hour a week for one year an additional class in literature; for one hour a week for two terms in one year a class in French or German Institutions.

### II. English:

The courses of study and subjects of examination in English taken as a subsidiary subject shall be: English Language: prescribed books in Old and Middle English; with elements of Old and Middle English Phonology. English Literature: the outlines with prescribed books, and a special period with prescribed books.

Candidates taking English as a subsidiary subject shall be required to attend: courses in Old and Middle English of one hour a week for three years; courses in English Literature of three hours a week in the first and third years, and of four hours a week in the second year.

#### Examination

The examination in each subject of the School shall consist of an oral examination and of the following papers:

FRENCH OR GERMAN AS A PRINCIPAL SUBJECT:

Composition and Essay, one paper.

Unprepared Translation, one paper.

Prescribed Texts of before 1500, with literary and linguistic questions, one paper.

Prescribed Texts of after 1500, with literary and linguistic questions, one paper.

Literature, one paper.

Grammar: History of the language and versification, one paper.

### ENGLISH AS A PRINCIPAL SUBJECT:

Translation of unseen passages of English, and of passages from Gothic and Old French, with questions suggested by the passages, two papers.

Translation from prescribed English books, with questions suggested by the passages, one paper.

A period of literature, one paper.

Essays and questions (literature), one paper.

History of the language and historical grammar, one paper.

### FRENCH OR GERMAN AS A SUBSIDIARY SUBJECT:

Prescribed tests, unprepared translation and composition, and historical grammar, two papers.

Literature, one paper.

#### English as a subsidiary subject:

Old and Middle English, one paper.

English Literature, two papers.

# Books and periods prescribed for 1908:

#### •I. FRENCH:

Books before 1500: E. Koschwitz, Les plus Anciens Monuments de la Langue Française (Serments, Eulalie, St. Léger); Vie de St. Alexis, ed. Paris; Aucussin et Nicolette, ed. Suchier, trans. Counson; Bartsch, Chrestomathie, col. 390-411, 462-495.

Books after 1500: Darmesteter et Hatzfeld, Morceaux choisis des Ecrivains du 16º siècle (both prose and verse); Descartes, Discours de la Méthode; Corneille, Le Cid, Polyeucte; Racine, Athalie; Molière, Le Misanthrope; Victor Hugo, Préface de Cromwell, Hernani, Notre Dame; Lamartine, Les Premieres Méditations.

Periods of literature: French Drama in the 17th Century; French Novel from 1820 to 1850.

### Books and periods prescribed for 1909:

Books as in 1908, with the substitution of Rousseau, Lettre sur les Spectacles, for Victor Hugo, Préface de Cromwell.

Periods of literature: French Tragedy in the 17th Century; Rousseau and the Romantic Revival; French Novel from 1820 to 1850.

Books and periods prescribed for 1908 and 1909:

#### II. GERMAN:

Books before 1500: Braune, Althochdeutsches Lesebuch ii, iv, vi-viii, xii, xiv, xv, xvi (1-8), xvii, xxiii (1-5), xxiv, xxviii-xxxi, xxxii, (1-4), xxxiv, xxxii, xli; Nibelungenhed Av. i-xii; Gottfried von Strassburg i, ii, viii; Baitsch, Liederdichter, xxi.

Books after 1500: Luther, vol. i (selection, ed. Neubauer, Halle)
nos. 3 and 10; Goethe, Faust, part i, Egmont; Schiller,
Wilhelm Tell, Gedichte der dritten Periode (in Mayr, Schillers
Gedichte, Wien); Lessing, Minna von Barnhelm, Nathan der
Weise, Hamburgische Dramaturgie (ed. Lyon, Velhagen and
Klasing); Grillparzer, Sappho.

Period of literature: Die zweite klassische Periode.

### Books and periods prescribed for 1910:

Books before 1500: Braune, Althochdeutsches Lesebuch ii, iv, vi-viii, xii, xiv, xv, xvi (1-8), xvii, xxiii (1-5), xxiv, xxviii-xxxi, xxxii (1-4), xxxvi, xxii; Gudrun ix-xxi., Gottfried von Strassburg i, ii, viii; Bartsch, Liederdichter, xxi.

Books after 1500: Hans Sachs, Selections (ed. Kinzel Halle) in Denkmaler der alteren deutschen Litteratur iii; Goethe, Faust, part 1, Gotzvon Berlichungen; Schiller, Wilhelm Tell, Gedichte der dritten Periode (in Mayr, Schiller's Gedichte, Wien); Lessing, Minna von Barnheim, Nathan der Weise, Hamburgische Pramaturgie (ed. Lyon, Velhagen and Klasing); Gerhart Hauptmann, die versunkene Glocke.

Period of Literature: Die zweite klassische Periode.

#### III. ENGLISH:

### i. Language

# A (1) As a principal subject, 1908:

OLD ENGLISH: Beowalf, 1888 to end; Andreas; Battle of Maldon; Sweet, Reader, xxx-xxxiv (dialect pieces); The Anglo-Saxon Chronicle (Laud MS.).

MIDDLE ENGLISH: Morris and Skeat, Specimens of Early English, vols. i and ii, the following pieces: Cursor Mundi: Barbour, Bruce: Ormulum: Genesis and Evodus: Chaucer, Man of Lawes Tale; Psatter; Ameren Riwle; Owl and Nightingale; Ayenbite of Inwit.

(2) As a principal subject, 1909:

The same prescribed books as in 1908.

B(1) As a subsidiary subject, 1908:

First Year Course: Sweet, Anglo-Savon Primer; Chaucer, Pardoner's Tale with Prologue to it; Old and Middle English Granmar.

Second Year Course: Sweet. Angle-Savon Reader, extracts vi, vii, viii, xxvi: Aneren Rræle (Sweet's extracts): Chaucer, Knight's Tale.

(2) As a subsidiary subject, 1909:

Prescribed books as for Final B.A. English Language, 1908 (see page 142).

ii. Laterature.

 1. 1908. OUTLINES OF ENGLISH LIFTERVIURE: Prescribed books as in M.A. (1909). See pages 162-3.
 Special Period: 1700-1784.

Prescribed books as for English Honours, 1958.

2. 1909. OUTLINES OF ENGLISH LITERATURE: Prescribed books as in 1908.

Special period: 1784-1850.

Prescribed books as for English Honours, 1909.

# History

Candidates for the degree of Bachelor of Arts with Honours in History shall be required to pursue the following course of study, and to submit themselves to the following examinations:

The course of study for the first year shall ambrace the following four subjects, as for the Intermediate examination for the Ordinary degree of B.A.: (1) Latin or Greek; (2) French or German; (3) Logic or English Literature, or a third Language: (4) History; and in addition (5) a second historical subject. An examination will be held in these subjects at the end of the first year, and must be passed before proceeding to further study.

Attendance on the full course for the Intermediate examination for the Ordinary degree of Bachelor of Arts may also be accepted by the Board of Faculty as the required attendance for the first year of the Honours course.

Attendance in the subjects of the School shall be required for ten hours a week in the second academic year, and eight hours a week in the third.

### Final Examination

Essay, one paper.

English (including Constitutional) History, two papers.

Outlines of European History, two papers.

Special period, studied in connection with the original authorities, two papers.

Economics and Economic History, one paper.

Political Theory, one paper.

In addition, candidates shall be required to present a dissertation on some subject approved by the Board of the Faculty of Arts.

Candidates shall also be required to show in the examination some knowledge of at least one foreign language (ancient or modern).

Special beriods for 1908 and 1909: (1) Roman History, 31 B.C.-140 A.D.; (2) European History, 1789-1804 A.D.; (3) History of France, 1226 1270 A.D.; (4) The Age of Queen Elizabeth.

# Philosophy

Candidates for the degree of Bachelor of Arts with Honours in Philosophy shall be required to pursue the following courses of study, and to submit themselves to the following examinations:

The course of study for the first year is that for the Intermediate examination for the Ordinary degree of B.A. or B.Sc., Logic being one of the subjects, and candidates must pass this examination before proceeding further on their Honours course.

During the second and third years candidates shall be required to attend approved courses in Philosophy of not less than five hours a week in each year.

They shall also be required to attend, during the second and third years, approved courses of lectures on other subjects, the number of lectures amounting to not less than two hours a week in each year.

#### Examination

Essay, one paper.

General Questions, one paper.

Logic, Deductive and Inductive, one paper.

Psychology, one paper.

Ethics, one paper.

Advanced Psychology or Moral and Political Philosophy, one paper.

Either History of Ancient Philosophy, one paper, and two papers on one of the following:

Descartes, Malebranche, Spinoza.

Spinoza and Leibniz.

English Philosophy from Locke to Hume, with reference to Bacon and Hobbes and to Reid and the Scottish Philosophy.

Kant.

Or, History of Modern Philosophy, one paper, and two papers on one of the following:

Greek Philosophy before Socrates.

Socrates and Plato.

Aristotle.

Post-Aristotelian Philosophy.

#### Economic and Political Science

The details of this course will be arranged later.

# DEGREE OF MASTER OF ARTS'

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rdinance.

- 1. The degree of Master of Arts may be conferred, on payment of the proper fee, upon registered Bachelors of Arts when of not less than one years' standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.
- 2. Bachelors of Arts who have graduated with Honours may proceed to the degree of Master of Arts on presenting a dissertation satisfactory to the Senate on a subject approved by the Board of the Faculty of Arts.<sup>2</sup>
- 3. Bachelors of Arts who have obtained the Ordinary degree shall be required to pass an examination in a subject or group of subjects upon which instruction is given in the Faculty of Arts, and to present a dissertation satisfactory to the Senate on a subject approved by the Board of the Faculty of Arts, or, if they do not present a dissertation, to pass a more extended examination. Regulations shall determine the subjects and groups of subjects in which the

<sup>1</sup> In 1908 the latest day of entry and payment of fee will be MONDAY, MARCH 2, and the examination held under I 3 will begin about Wednesday, June 10.

<sup>&</sup>lt;sup>2</sup> Students who have entered on an Honours course prior to October 1st, 1906, may obtain permission to proceed o the MA. degree under the provisions of the Ordinance published in the Calendar for the session 1905-6.

examination will be held. Certificates of attendance on courses of study in the University shall not be required. Bachelors of Arts who have obtained Honours in any school after the Ordinary degree shall be held to have satisfied the requirements of this clause.

4. The names of candidates who have passed the examination for the degree of Master of Arts shall be arranged in alphabetical order without distinction of classes.

#### H

Graduates or persons who have passed the Final examination for a degree of other approved Universities shall, if they present evidence satisfactory to the Senate that they are qualified to pursue a course of advanced study or research, be permitted to enter the University and to become candidates for the degree of M.A., without taking the B.A. degree, after not less than two years of such advanced study or research. Such candidates shall be required to give evidence to the Senate at the end of the first year of their period of study that their work has been satisfactory, and at the end of their second year they shall be required to present a dissertation, and to satisfy such further test, if any, as the Senate shall deem expedient.

### Examination

Bachelors of Arts who have obtained the Ordinary degree and are candidates for the degree of Master of Arts may present themselves for examination either in one of the following subjects, viz, Greek, Latin, French, German, English Language and Literature, History, Philosophy. Economics, Education, or in two of the following: Greek, Latin, French, German, English Language and Literature, History, Philosophy, Economics. Candidates who offer two subjects must submit their scheme of study for approval by the Board of the Faculty of Arts.

#### Greek

1. As a single subject.

Translation from Greek books selected, as a rule, from those prescribed for Honours in Classics, one paper.

Translation at sight and questions on the subject matter of the specified books, one paper.

Translation at sight and Greek prose composition, one paper. A dissertation on some subject approved by the Board of the Faculty of Arts.

II. In combination with another subject.

As above, with the omission of the dissertation.

Books prescribed for 1908: Homer, *Haad* xxii, *Odrvocy* ix, xi; Sophocles, *Antigone*; Euripides, *Bacchar*; Aristophanes, *Frogs*; Thucydides vii; Plato, *Republic* ii, iii; Demosthenes, *De Corona*.

Books prescribed for 1909: Homer, *Hiad* xxiv, *Odyssey* ix, xi; Sophoeles, *Philochetes*; Euripides, *Hippolytus*; Aristophanes, *Acharnians*; Thucydides i; Plato, *Republic* i, ii; Demosthenes, *De Corona*.

#### Latin

I. As a single subject.

Translation from Latin books selected, as a rule, from Prose prescribed for Honours in Classics, one paper.

Translation at sight and questions on the subject matter of the specified books, one paper.

Translation at sight and Latin prose composition, one paper.

A dissertation on some subject approved by the Board of the Faculty of Arts.

11. In combination with another surveit

As above, with the omission of the diss relation.

Books prescribed for 1908: Plautus, Carrie; Horace, Oder i-iii and Satires; Virgil, Innert i-iv; Cicero, Second Phrippie; Livy xxi; Tacitus, Annals n. Agricola; Juvenal iii, iv, v, x, xi, xiv.

Books prescribed for 1999; Plantus, Transmus; Horace, Odes i-iii, and Satires i; Vugil, Georgie; i, n. Aenerti-iv; Cicero, Second Philippie; Livy xxi; Fasitus, Histories m. Up nebe; Juvenal iii, iv, v, x, xi, xiv.

#### French

1. As a single subject.

Composition and essay, one paper.

Prescribed texts in Old and Modern French, including literary and linguistic study, one paper.

Unprepared translation and historical grammar, one paper.

French Literature (general outlines and special period or periods), one paper.

Oral examination.

A dissertation on some subject approved by the Board of the Faculty of Arts.

II. In combination with another subject.

As above, with the omission of the dissertation.

Books prescribed for 1908; G. Paris et Lauglois, Chrestomathie du Moyen Age; Darmesteter et Hatzfeld, Moveaux choises des Ecrivains du 10º sie le (poetry only); Corneille, Polyeuele; Molière, Le Misanthrope; Kacine, Athalie; Voltaire, Siècle de Louis XII, part iii; Victor Hugo, Hernani, Notre Dame.

Period of Literature for 1908: French Tragedy in the 17th Century.

Books prescribed for 1909: G. Paris et Langlois, Chrestomathie du Moyen Age; Darmesteter et Hatzfeld, Morceaux choisis des Ecrivains du 16º Siècle (prose only); Corneille, Polyeucte; Molière, Le Misanthrope; Racine, Athalie; Rousseau, Lettre sur les Spectacles; Victor Hugo, Hernant, Notre Dame.

Period of Literature for 1909: Rousseau and the Romantic Revival.

#### German

As a single subject.

Composition and essay, one paper.

Prescribed texts in Middle High German and New High German, including literary and linguistic study, one paper.

Unprepared translation and historical grammar, one paper.

German Literature (general outlines and special period or periods), one paper.

Oral examination.

A dissertation on some subject approved by the Board of the Faculty of Arts.

11. In combination with another subject.

As above with the omission of the dissertation.

Books prescribed for 1908: Bartsch, Liederdichter xxi; Nibelungenlied, Av. i xii; Luther (Selection, ed. Neubauer, Halle), i, nos. 3 and 10; Schiller, Wallensteins Lager, Pucolomini, Gedichte der dritten Periode (in Mayr, Schillers Gedichte, Wien); Goethe, Faust, i, and Egmont; Lessing, Hamburgische Dramaturgie.

Periods of Literature for 1908: Goethe's Life and Works; Lessing's Life and Works.

Books prescribed for 1909: Battsch, Lederdichter xxi; Nibelungenlied Av i-xii; Luther (Selection, ed. Neubauer, Halle), i, nos. 3 and 10; Schiller, Wilhelm Tell, Gedichte der dritten Periode (in Mayr, Schiller's Gedichte. Wien); Goethe, Faust, i, and Egmont; Lessing, Hamburgische Dramaturgie.

Periods of Literature for 1909: Lessing's Life and Works; Schiller's Life and Works.

# English Language and Literature

1. As a single subject.

Either

A dissertation.

Examination, written or oral or both, in subjects connected with the candidate's dissertation.

Outlines of English Literature with prescribed books, two papers.

w.

An essay, one paper.

Translation from prescribed books in Old and Middle English, and unseen translation, two papers.

Outlines of English Literature with prescribed books, two papers.

One of the following:

- (a) Old and Middle English Dialects, one paper, with Gothic, one paper.
- or (b) Shakespeare, two papers.
- II. In combination with another subject.

Either

An essay, one paper.

Translation from prescribed books in Old and Middle English, and unseen translation, two papers

Gothic, one paper.

Or

An essay, one paper.

Outlines of English Literature with prescribed books, two papers. A special author or subject, one paper.

Books and periods prescribed for 1908:

### I. As a single subject

- (a) For candidates specialising in Language: Ulfilas, The Epistles to the Romans and Corinthians; Beowulf, vv. 2223 to end; Chaucer, Troilus and Criveyde.
- (b) For candidates specialising in Literature: Beowull, vv. 2223 to end; Chaucer, Troilus and Criseyde; Coleridge, Poems written between 1798 and 1807; Wordsworth, Poems of 1802, Prelude, books i to v; Shelley, Prometheus Unbound; Keats, Pyperion and Odes; Byron, Vision of Judgment; Tennyson, Poems of 1832 and 1842; Scott, Waverley, Heart of Midlothian; Burke, Appeal from the New to the Old Whys, First Letter on a Reguide Peace; Carlyle, Sartor Resartus.

Special period for candidates specialising in Literature: 1785-1850.

# 11. In combination with another subject

Beowulf, vv. 2223 to end; Chaucer, House of Fame; Coleridge, Ancient Mariner, Christabel, Ode on Dejection; Wordsworth, Poems of 1802; Shelley, Idonais; Keats, Hyperion and Odes; Byron, Vision of Judgment; Tennyson, Poems of 1842; Burke, Appeal from the New to the Old Whigs; Carlyle, Lectures on Heroes.

Special period: 1785-1850.

Books and periods prescribed for 1909:

(1) Either (a) Beowulf, ii, 1-1651, and Morris and Skeat's Specimens of Early English, vol. i, extracts ii, vi, x, xii, xix, or (b) Chaucer, Minor Poems (Clarendon Press, ed. Skeat).

(2) Skakespeare, Richard II., King Lear; Bacon, Advancement of Learning; Marlowe, Faustus; Jonson, Every Man in his Humour; Spenser, Shepherd's Calender (ed. Herford); Milton, Samson Agonistes, Areopaytica; Dryden, Religio Laici, Essay of Dramatic Poetry; Pope, Moral Essays; Burke, Reflections on the French Revolution; Coleridge, Ancient Mariner, Christabet, Ode on Dejection; Shelley, Prometheus Unbound; Tennyson, In Memoriam; Browning, Selections (Smith, Elder, 1/-); Carlyle, Sartor Resartus; Palgrave, Golden Treasury.

### History

I. As a single subject.

An essay, one paper.

Either Ancient History (to 323 A.D.) General, two papers with special period in Ancient History, two papers.

Or Mediaval History (300 to 1300 A.D.), General, two papers, with special period in Mediaval History, two papers.

Or Modern History (since 1300 A.D.), General, two papers, with special Period in Modern History, two papers.

Candidates may substitute a dissertation for the essay and the two papers on the special period.

11. In combination with another subject.

(a) Ancient or Mediaval or Modern History, one paper.

(b) A special subject in the period taken under (a), two papers. Candidates must in every case satisfy the Board of the Faculty of Arts that the subjects they offer under (a) and (b) form a suitable combination.

Special periods for 1908 and 1909: (1) Roman History, 31 B.C.-14 A.D.; (2) French History, 1226-1270 A.D.; (3) The Age of Queen Elizabeth; (4) European History, 1789-1804 A.D.

Special period for 1910: As for 1909.

# Philosophy

As a single subject.

- (a) General Questions, one paper.
- (b) Three of the following:

Logic, one paper.

Psychology, one paper. Ethics, one paper.

Ethics, one paper.

History of Philosophy, Ancient or Modern, one paper. Advanced Psychology or Moral and Political Philosophy, one paper.

(c) One of the following special subjects, one paper.

Greek Philosophy before Socrates.

Socrates and Plato.

Aristotle.

Post-Aristotelian Philosophy.

Descartes, Malebranche, Spinoza.

Spinoza and Leibniz.

English Philosophy, from Locke to Hume, with reference to Bacon and Hobbes, and to Reid and the Scottish Philosophy.

Kant.

Candidates may as an alternative present a dissertation on a subject approved by the Board of the Faculty of Arts and present themselves for examination in three papers from section (b) or in two papers from section (c).

II. In combination with another subject.

History of Philosophy, Ancient or Modern, one paper.

Logic, or Ethics, or Psychology, or History of Philosophy, Modern or Ancient, one paper.

A special subject, approved by the Board of the Faculty of Arts, one paper.

#### **Economics**

- I. As a single subject.
  - (a) An essay, one paper.
  - (b) English Economic History, including the special study of a set period, two papers.
  - (c) One of the following:

General Principles of Economics, two papers.

A special Economic subject, two papers.

History of Economic Theory, including the special study of the work of a particular economist, two papers.

Candidates who have taken Economics as a subject for the degree of B.A. may not offer General Principles of Economics.

Candidates may as an alternative present a dissertation on a subject approved by the Board of the Faculty of Arts, and present themselves for examination in (b) or in one subject of (c). Such candidates may not offer a special Economic subject and a dissertation on the same subject.

11. In combination with another subject.

English Economic History or History of Economic Theory, one paper.

A special Economic subject, two papers.

Special period for 1908: 1603-1760.

Economist for special study for 1908: John Stuart Mill.

#### Education

(A) A dissertation on some subject related to Education and approved by the Board of the Faculty of Arts.

And (B) Either The Philosophy or Education, three papers, viz:

Philosophy, Social Philosophy, and Ethics, as related to the aim and form of Ed ration and the organisation of its means, one paper.

The Physiology and Psychology of Development as related to the processes of Education, one paper.

The Theory of Knowledge as related to the content and organisation of Instruction, one paper.

Or The History of Education, three papers, viz:

General History of the development of thought in relation to Education in Europe, with study of original authorities, two papers.

One of the following in detail with study of original authorities, one paper.

- (a) From beginnings of Greek education to 300 A.D.
- (b) A.D. 300 1400.
- (c) A.D. 1400--1760.
- (d) A.D. 1760- present time.
- (e) General study of the educational systems of France, Germany, and the United States of America.
- (f) A more detailed study, based on personal knowledge, of the educational system of any one country, selected by the candidate with the approval of the Board of the Faculty of Arts. The examination on this subject may consist of an inspection of the reports and note books presented by the candidate.

### DEGREE OF DOCTOR OF LETTERS'

1. The degree of Doctor of Letters shall be conferred by the University upon registered Masters of Arts of the University who shall be deemed by the Senate, after considering a report from the Board of the Faculty of Arts, to have distinguished themselves by special research or learning.

Ordinance.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from the Board of the Faculty of Arts, also require candidates to pass such an examination as it may from time to time determine.

- 2. A Master of Arts of the University may make application for the degree of Doctor of Letters in the sixth or any subsequent year from the date of his admission to the Bachelor's degree.
- 3. Such applications shall be made in writing to the Registrar, and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any thesis, whether in print or in manuscript, which the applicant may desire to submit in support of the application.

<sup>1</sup> In 1908 the latest date for application and payment of fee will be MONDAY, MeNRCH 2, and the examination, if required, will begin about Wednesday, June 10.

4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

### **DIPLOMAS**

# General Regulations

Applicable to all Diplomas

Ordinance.

Diplomas shall be granted by the University, in such subjects as the Council may from time to time determine, to students who pursue the courses of study and pass the examinations prescribed

The Council is empowered to make from time to time Regulations under which such Diplomas shall be awarded.

The award of Diplomas under the provisions of this Ordinance is delegated to the Senate.

Regulations.

Candidates for Diplomas are required to give satisfactory attendance upon all the subjects which form part of their course of study, and to present themselves for the class examinations held in the same. Those who do not pass satisfactorily in these examinations in any year will be disqualified for the Diploma unless they repeat the course in whole or in part, as may be required by the Senate.

At the close of the course, candidates will be required to present themselves for such examination in the main subject of study as may be prescribed.

Some deviation from these courses may be sanctioned in special cases, and students who on entering upon a Diploma course produce evidence that they possess a sufficient knowledge of the work done during a part of the course will be allowed to dispense with a certain amount of attendance. Applications for exemption from attendance should be made to the Head of the Department concerned.

# Diploma in Education

Regulations.

1. Candidates for the diploma in Education must be graduates of some University in the United Kingdom, or must have obtained such other academic qualifications as shall be approved by the Senate of the University. The

Senate will accept any qualification which is recognised by the Teachers' Registration Council as sufficient for the purpose of registration in Column B.

- 2. The course of study shall extend over at least one academic year, and shall consist of:
  - (a) Attendance in schools approved by the University for the purpose,
  - (b) Attendance upon courses of lectures in the Theory, Practice, and History of Education.

In the case of a student who has taken Honours in the Final examination for a degree after spending four academic years at some University in the United Kingdom, attendance for two consecutive terms will be accepted.

- 3. Such regular and continuous attendance in school shall be given throughout at least two terms as the Professor of Education may think desirable.
- 4. Satisfactory reports from (a) the head teacher of the school and (b) the University Education Department shall be presented before the candidate can enter for the examination.
- 5. Candidates shall attend prescribed courses of lectures at the University on the Theory, Practice, and History of Education.
- (Note.—All such courses may be taken in one academic year, but it is strongly recommended that students already in the University should take the preparatory course in the Theory of Teaching in a year previous to that given to preparation for the diploma. These courses will, as a rule, be those arranged for the subject of Education for the degree of B.A., except that for lectures on the organisation, curriculum and special methods of teaching in primary schools will be substituted a corresponding course having more definite reference to secondary schools).
- 6. The examination for the diploma shall take place in June, at the same time as the degree examinations, and shall consist of written papers and tests in practical skill. The written papers—except that in the Practice of Education—will, as a rule, be the same as those set in the degree examination.

The tests in practical skill shall consist in the delivery of lessons and an inspection of records of the candidate's

practical work in school. Importance shall be attached to reports on the candidate's work and skill from the head teacher of the school and from a member of the staff of the University Education Department.

- 7. Graduates in Arts or Science of this University who have included Education in the Final examination for their degree may obtain the diploma in Education after a further year's attendance on a course approved by the Board of the Faculty in which the degree was taken. Such course must include:
  - (a) Attendance in schools as specified in 2 (a) above;
  - (b) Attendance on a course of lectures on the practical work of secondary schools;
  - (c) Attendance on a course of study in Arts or Science approved by the Board of the Faculty as at least equivalent to the subject of Education taken as part of the Final course for the degree.

The examination for the diploma in Education will in these cases consist of the tests of practical skill, and the paper in the Practice of Education (s. 6).

The diploma in Education will not be issued until the candidate has also passed the degree examination in the subject or subjects included under (c).

- 8. The list of successful candidates shall be issued in alphabetical order, and no special honours shall be assigned to any candidate.
- 9. No diploma shall be issued until the candidate has passed in both the written and the practical parts of the examination. But a candidate who fails in the practical part only may, on the recommendation of the Examiners, be allowed by the Senate to present that part at a subsequent date without further written examination. In such cases the candidate must produce a satisfactory report from the head teacher of the school in which he (or she) has been teaching, and must submit records of work done.
- 10. Students taking the whole of the course for the diploma, whether in one or in two years, shall pay an inclusive fee of £14 14s. The fee for the examination shall be £1.

# Diploma for Teachers of French<sup>1</sup>

Candidates for this diploma will be required to have passed prescribed examinations, after pursuing a prescribed course of study.

The examinations for the diploma, to be conducted annually, will be:

- 1. The First examination, in language, of the same standard as the Final examination in French for the Ordinary degree of B.A., except that there will be no examination in literature or in prescribed authors.
- The Second examination, in methods of teaching and in phonetics.

Candidates for the diploma will be required

- (1) To pass the First examination, or to give satisfactory evidence that their knowledge of the French language is not below the standard of that examination.
- (2) To attend for at least one year the University class preparatory to the Second examination.<sup>1</sup>
- (3) To pass the Second examination.

Fee for the whole examination,  $\mathcal{L}_{1}$ .

# Diploma for Teachers of German<sup>2</sup>

The regulations for this diploma are the same as above, with the substitution of "German" for "French" throughout.

<sup>1</sup> See page 178.

<sup>2</sup> See pages 181-2.

# Courses in Arts

### CLASSICS

Professor Rhys Roberts
Professor Connal
Mr. Greenwood

### GREEK LANGUAGE AND LITERATURE

# I. Elementary Class

This class will be for beginners; it will not be held unless there is a reasonable number of entries.

Saturdays at 9.30 a.m.

Fee for the session,  $f_{i,t}$  is.; for a term, 7s. 6d.

Books recommended

A First Greek Book to be chosen when the class meets. Sonnenschein's Greek Grammar (Swan Sonnenschein).

### II. Matriculation Course

The work in this course will comprise grammar, elementary composition, translation at sight, and the special study of (a) Homer, *Iliad* i and vi, and (b) either Plato, *Apology*, or Xenophon, *Anabasis* ii.

Mondays, Wednesdays, and Fridays at 11.30 a.m., and a class in composition on Saturdays at 10.30 a.m.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Homer, Iliad i-xii, Monro (Oxford University Press).Plato, Apology, Adam (Cambridge University Press), or some illustrated edition of Xenophon, Anabavis ii.

#### III. Intermediate Course

The work in this course will comprise composition, translation at sight and the special study of Herodotus ix, cc. 1-89 and Euripides, *Rhesus*.

Mondays, Wednesdays and Fridays at 3 pm., and a composition class on one other hour a week at a time to be fixed.

Fee for the course: without the class in composition £3 13s. 6d; for the composition class, £1 5s.

Rooks recommended

Jebb, Primer of Greek Literature (Macmillan). Herodotus ix, Shuck, urgh (Cambridge University Press), and a Greek Text of the Rhesus. Greek 171

# IV. Final Course (First Year)

The work in this course will comprise composition, translation at sight, and the special study of books to be selected when the class meets.

Mondays at 3 p.m., Tuesdays at 9.30 a.m., and Fridays at 10.30 a.m. Composition class on Fridays at 3 p.m.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

### Books recommended

Murray's, Jevons's, or Mahaffy's *History of Greek Literature*; or Croiset's (the abridged edition). Sidgwick's *Greek Prove Composition* (Rivington).

# V. Final Course (Second Year)

The work in this course will comprise composition, translation at sight, and special study of Plato, *Republic* i and ii; Homer, *Iliad* xviii; Aristophanes, *Frogs*.

Mondays, Wednesdays and Fridays, at 9.30 a.m., and a composition class on one other hour a week at a time to be fixed (probably Friday at 4 p.m.)

Fee for the course: without the class in composition, £, 3 13s. 6d.; for the composition class, £, 1 5s.

#### Books recommended

Murray's, Jevons's, or Mahaffy's *History of Greek Literature*; or Croiset's (the abridged edition).

Plato, Republic, text edited by Adam (Cambridge University Press).

Autenrieth, Homeric Dictionary (Macmillan).

Jebb, Introduction to Homer (Maclehose).

Homer, Iliad xiii-xxiv, Monio (Oxford Press)

Aristophanes, Frogs, as edited by Merry (Oxford University Press) or Tucker (Macmillan).

#### VI. M.A. and Honours Course

The work in this course will comprise composition, translation at sight, and the study of books prescribed for the examinations for Honours in Classics, and for the M.A. in Greek (see pages 148 and 160).

Mondays, Tuesdays, Wednesdays, and Thursdays, at 10.30 a.m., and Saturdays at 11.30 a.m. (composition).

Fee for the course: without the class in composition £5 15s. 6d.; for the composition class, £1 5s.

#### LATIN LANGUAGE AND LITERATURE

#### I. Matriculation Course

The work in this course will comprise grammar, elemen tary composition, translation at sight, and the special study of Caesar, de Bello Gailico v, and Virgil, Aencid ii.

Mondays, Wednesdays and Fridays at 10.30 a.m., and Thursdays at 11.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d; for the composition class £1 5s.

Books recommended

Caesar, de Bello Gallico v, Brown (Blackie). Virgil, Aeneid ii, Sidgwick (Pitt Press), or Page (Macmillan).

#### II. Intermediate Course

The work in this course will comprise composition, translation at sight, and the special study of Livy xxi, and Virgil, *Georgics* iv, *Aeneid* vi.

Mondays, Wednesdays and Fridays at 9.30 a.m., and Tuesdays at 10.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Livy xxi, Dimsdale (Pitt Press) Virgil, Georgics iv, Aeneid vi, Page (Macmillan).

# III. Final Course (First Year)

The work in this course will comprise composition, translation at sight, and the special study of selected books, two of which will be Livy xxii and Horace, *Epistles* i.

Mondays, Wednesdays, and Fridays, at 11.30 a.m., and Tuesdays, at 11.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Livy xxii, Dimsdale (Pitt Press). Horace, *Epistles* i, Shuckburgh (Pitt Press).

# IV. Final Course (Second Year)

The work in this course will comprise more advanced composition, translation at sight, and the special study of Tacitus, *Annals* ii, and *Juvenal* iii, iv, v, x, xiv.

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Mondays, Wednesdays and Fridays at 4 p.m., and Tuesdays at 11.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

#### Books recommended

Tacitus, Annals i-iv, Furneaux (Clarendon Press). Juvenal, Duff (Pitt Press).

#### V. M.A. and Honours Course

For students reading for the  $M.\Lambda$ , or Honours examination.

Tuesdays, Thursdays, and Saturdays at 9.30 a.m., and Saturdays at 10.30 a.m. (composition).

Fee for the course: without the class in composition,  $\pm 3$  13s. 6d.; for the composition class,  $\pm 1$  5s.

# Books recommended for Classical Students

Such books as the following will be found useful by classical students:

- Murray's Ancient Greek Literature, Jevons's Greek Literature, Mahafly's Greek Classical Literature, Croiset's Abridged History of Greek Literature, Mackail's Latin Literature, Cruttwell's History of Roman Literature.
- Sandys' History of Classical Scholarship, Saintsbury's History of Criticism, Evelyn Abbott's Hellenica, Butcher's Aspects of the Greek Genius and Harvard Lectures on Greek Subjects, Dickinson's Greek View of Life, Tucker's Life in Ancient Athens, Whibley's Companion to Greek Studies, Greenidge's Roman Public Life, Lauciani's Destruction of Ancient Rome, G. F. Hill's Greek and Roman Coins, P. Garduer's Grammar of Greek Art, E. A. Gardner's Handbook of Greek Sculpture.
- Jobb's Growth and Influence of Classical Greek Poetry, Symonds' Studies of the Greek Poets, Butcher's Aristotle's Theory of Poetry and the Fine Arts, Jobb's Introduction to Homer, Browne's Homeric Study, Haigh's Attic Theatre and Tragic Drama of the Greeks, Decharme's Euripide et l'esprit de son Théâtre, Jebb's Attic Orators.
- Tyrrell's Latin Poetry, Schlar's Roman Poets of the Republic and Roman Poets of the Augustan Age (Virgil, Horace), Glover's Studies in Virgil, Martha's Poeme de Lucrèce, Boissier's Cicéron et ses amis.
- Giles's Comparative Philology, V. Henry's Comparative Grammar of Greek and Latin, Goodwin's Greek Moods and Tenses, Gildersleeve's Greek Syntax, Monro's Homeric Grammar, the Latin Grammars of Roby, Madvig, Gildersleeve and Lodge, Sidgwick's Lectures on Greek Prose Composition.

# ENGLISH LANGUAGE & LITERATURE

# Professor Vaughan Dr. Moorman

# I. Matriculation Course (Literature)

The work in this course will include the study of English essay writing and of the following works: Shakespeare, Twelfth Night; Milton, Paradise Lost, books iv, v.; Cowper, Letters, (Golden Treasury Selection)

Tuesdays at 11.30 a.m. throughout the session, and Thursdays at 2 pm. in the second and third terms.

Fee for the course, £,2 58.

# II. Intermediate Course (Literature)

The work in this course will comprise the history of English literature from 1785 to 1830, and the special study of Palgrave, Golden Treasury, book iv; Wordsworth and Coleridge, Lyrical Ballads with prefaces and appendix; Shelley, Adonais; Byron, Childe Harold, book iii, and Manfred; Scott, Heart of Midlothian; Shakespeare, Romeo and Juliet; Chaucer, Prologue to Canterbury Tales.

Mondays, Wednesdays and Fridays at 10.30 a.m. throughout the session.

Fee for the course, £3 13s 6d.

# III. Intermediate and First Year Honours Course (Language)

The work in this course will comprise the history of the English Language and the special study of Sweet, Anglo-Saxon Primer, and Anglo-Saxon Keader extracts ii, iv, x, xv; Morris and Skeat, Specimens of Early English, vol. i, extract 19 (King Horn); Chaucer, Prologue to Canterbury Tales.

Three hours a week, at times to be arranged.

Fee for the course, £3 13s. 6d.

#### IV. Final Course

Students taking English in the Final course may offer English Literature and Language as a principal subject (see p. 142), or English Literature alone as a subsidiary subject (see p. 144).

The courses will be as follows:

# a. English Literature

The work in this course will comprise the History of English Literature from 1785 to 1850 and the special study of Palgrave, Golden Treasury, Book iv; Wordsworth and Coleridge, Lyrical Ballads with prefaces and appendix; Wordsworth Michael, Story of Margaret (from Excursion, Book i); Shelley, Adonais, Defence of Poetry; Keats, Hyperion; Lamb, Essays of Elia; Tennyson, Maud; Browning, Selected Poems (publisher, Smith, Elder); Shakespeare, Twelfth Night; Chaucer, Man of Law's Tale.

Mondays, Wednesdays and Fridays, at 10.30 a.m.,

throughout the session.

Fee for the course, £3 13s. 6d.

# b. English Literature and Language

The work in this course will comprise, in addition to what is entered under (a), (1) for students in the first year of their Final course, a study of the Elements of Old and Middle English, Sweet, Anglo-Saxon Primer, Chaucer, Nun's Priest's Tale; (2) for students in the second year of their Final course, Sweet, Anglo-Saxon Reader, extracts x, xv, xxii; Ancren Riwle (Sweet's extracts): Chaucer, Nun's Priest's Tale.

One hour a week throughout the session.

Fee for the course,  $\mathcal{L}_{1}$  11s. 6d.

# V. Honours Course, Second Year (Literature)

This course will be devoted to the study of the Outlines of English Literature.

One hour a week at a time to be arranged.

Fee for the course,  $\mathcal{L}_1$  11s. 6d.

# VI. and VII. Honours Courses, Second and Third Years (Literature)

These courses will be devoted to the study (1) of the History of Literary Criticism; (2) of the period 1637-1700.

One hour a week for each of these courses, at a time to be arranged.

Fee for each of these courses, £1 11s, 6d.

# VIII. Honours and M.A. Course (Language)

Honours students in their second year attend this course for two hours a week, Honours students in their third year attend for one hour a week.

Translation from Old and Middle English texts, as prescribed for the Honours School (see page 155).

Fee for two hours a week,  $\pounds 2$  128. 6d.; for one hour,  $\pounds 1$  118. 6d.

#### IX. Post-Graduate Course

A special course, mainly intended for post graduate students, will be delivered on the Literary Relations between England and France in the eighteenth century.

One hour a week during the first two terms, at a time to

be arranged.

Fee for the course, £1 18.

# Evening Course

See page 360.

# FRENCH LANGUAGE AND LITERATURE

Professor Barbier Dr. Rudmose-Brown

#### I. Matriculation Course

The work in this class will comprise grammar, elementary composition, translation at sight, conversation in French, and the study of special books.

Mondays, Wednesdays and Fridays, at 3 p.m.

Fee for the session, £3 13s. 6d.

Books recommended

de Vigny, Cinq Mars (Macmillan).

Augier and Saudeau, Le Gendre de Monsieur Poirier (Hachette).

# II, III. Intermediate Courses

The work done in these two courses is the same in every respect. It will comprise grammar, composition, dictation, translation at sight, conversation in French, and the special study of de Vigny, Selected Poems (Moise, Le Déluge, Le Cor); Balzac, César Birotteau.

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Course II will be held on Mondays, Wednesdays and Fridays at 11.30 a.m., Course III at 4 p.m. on the same days.

Fee for either course, £, 3 13s. 6d.

Book recommended

Balzac, César Birotteau (Calmann-Lévy, 1s.)

#### IV. Final Course

The work in this course will comprise more advanced syntax and composition, translation at sight, the elements of historical grammar and phonetics, and the special study of Corneille, *Polyeucle*, and Racine, *Athalie*.

Mondays, Wednesdays and Fridays, at 2 p.m.

Fee for the session,  $f_{3}$  13s. 6d.

Books recommended

Corneille, *Polyeurte* (Pitt Press, 2s.) Racine, *Athalie* (Pitt Press, 2s.) Gase, *French Prove Composition* (Bell).

### V. French Literature

Lectures on *French Tragedy in the seventeenth century* will be given in French on Tuesdays at 3 p.m., during the first and second terms.

Fee, £1 is. No entry will be taken for less than two terms.

### VI. French Literature Revision Class

Tuesdays at 3 p.m. during the third term.

Students reading for the Final B.A. and Honours are expected to join this class.

Fee, ros. 6d.

Books recommended

Doumic, Histoire de la Lattérature Française (Delaplane, 38. 4d.) Lanson, Histoire de la Lattérature Française.

#### VII. Honours Course

Mondays, Wednesdays and Fridays, at 4 p.m. Fee for the session: two hours, £2 128. 6d.; three hours, £3 138. 6d.

### VIII. Commercial Course.

Two hours a week at times to be arranged.

In addition to the study of French correspondence, etc., a book bearing on French commercial life will be read.

Fee, £2 12s. 6d.

# IX. Saturday Morning Training Course (A)

This class will meet on Saturdays, from 10.15 a.m to 12.15 p.m., beginning October 5. (N.B. The hours may be slightly altered to meet the convenience of students living outside Leeds.)

The course will cover the work in language required for the First examination in connection with the University diploma for teachers of French (see p. 169), but students who are not candidates for the diploma will also be admitted on satisfying the Professor that they are sufficiently qualified.

Fee for the course, £,2 128. 6d.

# X. Saturday Morning Training Course (B)

This class will meet on Saturdays, from 10.15 a.m. to 12.15 p.m., beginning October 5. (N.B. The hours may be slightly altered to meet the convenience of students living outside Leeds.)

The course will cover the work in phonetics and methods of teaching required for the Second examination in connection with the University diploma for teachers of French (see p. 169), but students who are not candidates for the diploma will also be admitted on satisfying the Professor that they are sufficiently qualified.

Fee for the course, £,2 12s. 6d.

#### XI. French Institutions.

Lectures on the Institutions of Modern France will be given on Tuesday at 9.30 a.m. during the first two terms.

Fee for the course,  $\mathcal{L}_{1}$  is. No entry will be taken for less than the two terms

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# GERMAN LANGUAGE AND LITERATURE

Professor SCHÜDDEKOPF

# Mr. Gough

I. Elementary Course

Mondays, Wednesdays and Fridays, at 2 p.m.

This class is intended for beginners. Special attention will be given to students of science.

Fee for the course, £3 13s. 6d.

Books recommended

Kuno Meyer, German Grammar, part i (Sonnenschein). Sonnenschein, First German Reader and Writer (Sonnenschein). Fiedler-Sandbach, First German Course for Science Student (Moring).

Chalmers, Gedichte zum Answendiglernen (Harrap).

#### II. Matriculation Course

Mondays, Wednesdays and Fridays, at 4 p.m.

This course is intended for students who already possess an elementary knowledge of German. In addition to the study of grammar and composition, the books set for the Matriculation examination will be read; but instead of these, students of science will have the option of reading German prose bearing on various branches of science. German conversation will be practised.

Fee for the course, £3 13s. 6d.

Books recommended

Kuno Meyer, German Grammar, parts 1 and ii (Sonnenschein). Second German Reader and Writer (Sonnenschein). Riehl, Kultingeschichtriche Novellen (Pitt Press). Klee, Die deutschen Heldensagen (Pitt Press). Fiedler-Sandbach, Second German Course for Science Students (Moring).

#### III. Intermediate Course

Mondays, Wednesdays and Fridays, at 3 p.m.

This course is suitable for candidates entering for the Intermediate examination, for commercial students, and for general students who wish to acquire a greater proficiency in German. In addition to the prescribed work, syntax, dictation, composition, and unprepared translation will be studied, and the class will have considerable practice in German conversation.

• Fee for the course, £3 13s. 6d.

#### Books recommended

Kuno Meyer, German Grammar, parts i and ii (Sonnenschein). Third German Reader and Writer (Sonnenschein). Lessing, Minna von Barnhelm, ed. Buchheim (Clarendon Press). Schiller, Select Ballads, ed. Weekley (Blackie and Son).

### IV. Final Course

Mondays, Wednesdays and Fridays, at 9.30 a.m.

The work of this class comprises revision of German syntax, the elements of historical grammar and phonetics, translation, and composition. The class will be taught in German.

Fee for the course, £3 13s. 6d.

Books recommended

Lessing, Hamburgische Dramaturgie, ed. Lyon (Velhagen and Klasing).

German Dactylic Poetry, ed. Wagner (Pitt Press). Longmans' German Composition (Longmans, 3s.). Behaghel, Du deutsche Sprache (Leipzig, Freytag). Rippmann, Etements of Phonetics (Dent).

### V. German Literature

Two courses of lectures will be delivered in German during the first and second terms, on Tuesdays, at 4 p m., commencing October 8.

Subject for the first term: Die Vorganger der zweiten klassischen Periode; Klopstock: Herder; Wieland.

Subject for the second term: Lessing's Leben und Werke. During the third term a German Literature Revision Class will be held for candidates reading for Honours or M.A. in German, or the Final B.A. examination.

Fee for the first two terms, £1 1s.; for one term, 1os. 6d.; for the whole course, £1 11s. 6d.

#### VI. Lower Commercial Course

Tuesdays and Thursdays, at 3 p.m.

In addition to the study of German correspondence, &c., a book bearing on German commercial life will be read, the title of which will be announced at the beginning of the first term. The class will be taught in German.

Fee for the course  $\mathcal{L}_{2}$  128. 6d.

Book recommended
Whitfield-Kaiser, Course of Commercial German (Longmans).

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# VII. Higher Commercial Course

Tuesdays and Thursdays at 2 p.m.

The study of German correspondence, etc., will be continued, and German books on economic subjects will be read, the titles of which will be announced at the beginning of the first term. The class will be taught in German.

Fee for the course, £,2 12s. 6d.

Book recommended

Whitfield-Kaiser, Course of Commercial German (Longmans).

#### VIII. Honours Course

Mondays, Wednesdays and Fridays at 10.30 a.m.

The work of this class will comprise Old and Middle High German grammar and literature, and interpretation of Old High German and Middle High German texts. Part of the work taken in this course is also suitable for graduates reading for the M.A. examination.

For books and periods see page 155.

Fee for the course, £3 13s. 6d.

# IX. Saturday Morning Training Course (A)

This class will meet on Saturdays, from 10.15 a.m. to 12.15 p.m., beginning October 5. (N.B. The hours may be slightly altered to meet the convenience of students living outside Leeds.)

The course will cover the work in language required for the First examination in connection with the University diploma for teachers of German (see p. 169), but students who are not candidates for the diploma will also be admitted on satisfying the Professor that they are sufficiently qualified.

Books recommended

Paszkowski, Lesebuch zur Einführung in die Kenntnis Deutschlands (Berlin, Weidmann).

Meyer, German Grammar, parts i and ii (Sonnenschein). Behaghel, Die deutsche Sprache (Leipzig, Freytag).

Kaiser, Exercises in German Composition (Arnold).

Fee for the course, £, 2 128. 6d.

# X. Saturday Morning Training Course (B)

This class will meet on Saturdays, from 10.15 a.m. to 12.15 p.m., beginning October 5. (N.B. The hours may be slightly altered to meet the convenience of students living outside Leeds.)

The course will cover the work in phonetics and methods of teaching required for the Second examination in connection with the University diploma for teachers of German (see p. 169), but students who are not candidates for the diploma will also be admitted on satisfying the Professor that they are sufficiently qualified.

Fee for the course, £,2 12s. 6d.

### HISTORY

Professor Grant
Miss Cooke

### I. Matriculation Course

Outlines of English History. Tuesdays and Thursdays at 10.30 a.m. Fee for the course, £2 12s. 6d.

### II and III. Intermediate Courses

II. Outlines of Greek and Roman History. The following Lives of Plutarch will be studied in connection with this course: —Lycurgus, Solon, Pericles, Alexander, Marcus Cato, the Gracchi, Marius, Julius Caesar.

Tuesdays and Thursdays at 11.30 a.m.

Fee for the course, £2 12s. 6d.; for Greek History or Roman History alone, £1 11s. 6d.

III. Modern History from 1763 to 1900.

Two hours a week at times to be arranged.

This course will not be given unless there are candidates for the degree of B.Com.

Fee for the course, £,2 12s. 6d.

# IV-X. Final Courses First Year:

IV. Outlines of European History since the Roman Empire.

Tuesdays and Thursdays, at 10.30 a.m.

Fee for the course,  $\mathcal{L}$ , 2 12s. 6d.

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#### Books recommended

G. R. Adams, European History (Macmillan). Grant, Outlines of European History (Longmans). Myers, General History (Ginn). Robinson, Readings in European History, 2 vols. (Ginn).

V. Tutorial Class in the above course.

Mondays at 2 p.m.

Fee for the course, £1 11s. 6d.

#### Second Year:

VI. Greek History from 445 to 399 B.C. This course will include the study of the intellectual and artistic, as well as the political, history of Greece during the period. No knowledge of Greek will be required.

The following will be studied (in translation) in connection with this course: The Knights and Acharnians of Aristophanes; the Intigone, Occipus the King and Occipus at Colonus of Sophocles; the Enthyphron, Crito and Apology of Plato.

Tuesdays and Thursdays at 9.30 a.m.

Fee for the course, £2 128. 6d.

VII. Roman History from 510 B.C. to 134 B.C.

Tuesdays and Thursdays at 9.30 a.m.

Fee for the course,  $\pounds$ , 2 12s. 6d.

VIII. European History: the Thirteenth Century.

Mondays and Wednesdays at 11.30 a.m.

Fee for the course, £,2 12s. 6d.

IX. English History from 1529 to 1603.

Mondays and Wednesdays at 9.30.

Fee for the course,  $\pounds$ , 2 12s. 6d.

Note:—The above periods will be studied in connection with certain of the original authorities which will be indicated at the beginning of the session.

X. Economic History. (Professor CLAPHAM)

The commercial and industrial history of England, mainly in the nineteenth century.

Two hours a week at times to be arranged.

Fee for the course, £2 12s. 6d.

Candidates are recommended to choose from the above one ancient and one modern period.

### XI-XV. Honours and M.A. Courses.

XI. English Constitutional History.

Two hours a week at times to be arranged.

Fee for the course, £2 12s. 6d.

XII. Roman History from 31 B.C. to 14 A.D.

Two hours a week at times to be arranged.

Fee for the course,  $\pounds$ , 2 128. 6d.

XIII. The History of Political Theory.

Two hours a week at times to be arranged.

The course will include the problems and theories of the ancient city state; the medieval empire; the development of the theory of the social contract.

Fee for the course, £,2 128. 6d.

XIV. A class for the study of certain original authorities on the History of France from 1789 to 1804.

Fridays at 9.30.

Among the authorities studied will be Rousseau's Social Contract; Constitutional Documents of the French Revolution; certain Orators of the French Revolution; Napoleon's Concordat; and Lord Whitworth's despatches from Paris in 1803.

Fee for the course, £1 11s. 6d.

XV. Essay Class.

Mondays at 3 p.m.

Fee for the course, £,1 11s. ód.

### PHILOSOPHY

#### Mr. GILLESPIE

# I. Intermediate Course: Logic

Wednesdays and Fridays, at 2.

This course deals with the elements of logic, deductive and inductive. Students will find it useful to familiarise themselves with the elementary formal logic, in some such text-books as *Jevons* or *Fowler*, before entering the class.

Fee for the course,  $f_{12}$  128. 6d.

Book recommended

Welton, Manual of Logic (2 volumes, Clive, 15s.).

# II. Final Course: Psychology

Three lectures a week throughout the session, at hours to be arranged.

This course includes the outlines of general psychology, with the more detailed study of some special branch.

Fee for the course, £3 138. 6d.

Book recommended

Stout, Manual of Psychology (Clive, 8s. 6d.).

# III. Final Course: History of Ancient Philosophy

Three hours a week throughout the session, at hours to be fixed at the beginning of the first term.

Subjects: The outlines of the history of Greek philosophy with more detailed study of special books. The *Republic* of Plato will be read in the session 1907-8.

Fee for the course,  $\pounds$ , 3 13s. 6d.

# IV. Ancient Philosophy

Two hours a week throughout the session, at hours to be fixed at the beginning of the first term.

This course is intended for candidates for Honours in Classics, and will not be held unless such candidates present themselves.

Fee for the course, £2 12s. 6d.

### V. Honours Courses

Lecture courses of one or two hours a week each on some of the subjects prescribed for the Honours School of Philosophy and for M.A. in Philosophy.

Courses of two hours a week each on (1) Logic, (2) Locke, Berkeley and Hume, will be held at times to be arranged.

Fee for a course of two hours a week, £2 12s. 6d; for a course of one hour a week, £1 11s. 6d.

## **EDUCATION**

Professor Welton
Miss Robertson

Mr. Welpton Miss Turner

Mr. HOGGETT

# Day Training College for Teachers for Primary Schools

A Day Training College, under the provisions of the Education Code, was established in 1891.

The following particulars are supplied for the information of candidates who desire to be admitted to the Leeds Day Training College as King's Scholars.

1. Pupil Teachers who have successfully completed their term of apprenticeship, or who terminate their engagement with the consent of their managers, and others who, not having been Pupil Teachers, will be over 18 years of age on October 1st in the year in which they wish to enter, may apply for admission to the Leeds Day Training College. Such applications should be made as early as possible.

2. Applicants will be required to furnish certificates of sound health and good conduct. Forms for such certificates

will be supplied by the Registrar.

- 3. Candidates who desire to present themselves for the Preliminary Examination for the Elementary School Teacher's Certificate must give notice to the Board of Education before the 1st of October. That examination is held in Leeds, not at the University, but at the Education Offices, and candidates who wish to be examined in Leeds must apply to the Clerk of the Education Committee of the City Council for seats.
- 4. All candidates, whether they have passed the examination named in paragraph 3 or not, will be required to pass the Matriculation examination of the University before

admission, and to declare their intention, if admitted, of completing the three years' course required for a degree.

5. To fulfil the regulations of the Board of Education, candidates for admission to the Day Training College must present themselves at the Matriculation examination in English Literature under (1), and in Geography under (3) of the Regulations for Matriculation, unless they possess certificates of having passed in one or both of these subjects at an equivalent University examination.

Candidates who propose to read for a degree in Arts must offer Latin and one other language under (3).

Candidates who have already matriculated and who did not include the subjects mentioned above in their examination may present themselves in the omitted subject or subjects at any subsequent examination held before they desire to enter the College.

Preference will be given to candidates who satisfy the examiners in alternative papers of a higher standard (see Syllabus of Matriculation Examination, to be obtained from the Secretary of the Joint Matriculation Board, The University, Manchester).

- 6. Before being accepted candidates must be examined by the Medical Officer of the College, and reported as strong and in good health.
- 7. All candidates will, on admission, be required to sign a declaration of their intention to become Elementary teachers.
- 8. Candidates accepted will be required to come into residence at the beginning of October. They will be at liberty to reside at their own homes if these are within reasonable distance of the University, or they may, by permission of the Managing Committee of the Training College, reside in lodgings which have been inspected, and are registered and subject to inspection, by the University authorities.
- 9. The Leeds Day Training College year coincides nearly with the session of the University of Leeds, which begins in October, is divided into three terms of about eleven weeks each, and ends in June. Training College students will be engaged in their practical training during certain parts of the University vacations.

- 10. The Government grant for maintenance of £25 a year for men and £20 a year for women students will be paid, at the times and in the instalments prescribed by the Board of Education, to such King's Scholars as reside at home or in registered lodgings.
- vil. All King's Scholars admitted to the Training College will be required to pay annually a charge of £10, and also a sum of 10s. 6d., the compulsory fee payable for membership of the University Union. No further payment to the University will be required, but Scholars will have to provide their own books, and those who work in the University laboratories will have to supply themselves (by purchase or hire) with a small amount of scientific apparatus. The University examination fees will also have to be paid by all King's Scholars.
- 12. The King's Scholars in residence will be admitted without additional fee to the lectures, classes, and laboratory work required for their prescribed courses of study.
- 13. All students of the Day Training College will attend the classes and will be required to enter for the examinations qualifying for a degree of the University.
- N.B. The attention of candidates is drawn to the following Regulation of the Board of Education.
- Art. 44c. As a condition of continued recognition a three year student must in each year of the course make due progress towards obtaining his Degree.
- No student will be regarded as making due progress unless he passes any examination which may form an Intermediate Stage in the course for a University Degree no. later than the time contemplated by the ordinary arrangement of the University course of study. (This imposes on the student the necessity of passing the Intermediate Examination for a Degree at the end of the first year).
- 14. The Government certificate will be issued on the results of examinations conducted in part by the Board of Education and in part by the University. Students substitute approved University examinations for the greater part of the syllabus of the Certificate examination conducted by the Board of F lucation.
- N.B. Applicants should notice the following Regulation of the Board of Education.

- Art. 50 b. A Three Year Student who fails to pass his (or her) Final Degree Examination at the end of his third year, but is qualified in other respects, may be recognised as a Certificated Teacher for a period of one year and nine months after the close of his period of training. At the end of that period such recognition will cease, unless he has then passed either the Final University Examination for a Degree or the Certificate Examination of the Board.
- 15. The professional training of the students is conducted by the staff of the department of Education. This training includes courses of lectures and written exercises in the History, Theory, and Art of Education forming part of the course for a degree, supplemented by practical work in selected schools under the supervision of the professional staff.
- 16 Attendance on courses of instruction in Music, Drawing, Reading and Recitation, and Needlework (for women) is compulsory under the Regulations of the Board of Education.

# Teachers for Secondary Schools

A tull course of instruction in the theory and practice of education is provided for men and women students intending to become teachers in secondary schools. Such students attend the ordinary courses of lectures in Education and criticism lessons, and special courses to prepare for the Diploma in education of the University are provided as required.

Arrangements are also made for practical training in class teaching and management in certain selected secondary schools in Leeds or the immediate neighbourhood.

The whole course may be taken in one session, or may be spread over two or three sessions.

# Diploma in Education

For Regulations, see page 166.

#### LECTURE COURSES

## I. Education: First Year Course

Lectures on Mondays, Wednesdays and Fridays, at 4, p.m.

Each Term—General nature of education. The psychological foundations of the general principles of educational method. Applications of the general principles of method to the teaching of the usual school subjects and the preparation of notes of lessons. Three hours a week.

Each Term—Criticism Lesson. One and a half hours a week on Thursdays at 3.15 p.m.

Fee (except for King's Scholars in the College) for lectures only, £3 13s. 6d.; for lectures and criticism lessons, £4 4s.

## II. Education: Second Year Course

Lectures on Tuesdays and Thursdays at 9.30 a.m. throughout the session.

First Term—Physical education and school hygiene. School organization.

Second Term—The logical foundations of teaching.

Third Term - The psychological and ethical foundations of moral education, with applications to school discipline.

Each Term -- Criticism Lesson. One and a half hours a week on Thursdays at 3.15 p.m.

Fee (except for King's Scholars in the College) for lectures only,  $£_3$  3s.; for lectures and criticism lessons,  $£_3$  13s. 6d.

#### III. Education: Third Year Course

Course A. Tuesdays and Thursdays at 10.30 am. The history of educational thought in Western Europe from the Renascence to the present time, with special reference to England, and special emphasis on the Nineteenth Century.

Course B. Thursdays at 2 p.m. Plato, Republic, ii, iii, iv.

A discussion class on the Practice of Education will be held on Wednesdays at 3 p.m. in the first and second terms, if a sufficient number of students wish to join it. Attendance optional.

Criticism Lessons. Each term for one and a half hours per week. Thursdays at 3.15 p.m.

Fees (except for King's Scholars in the College):—Course A, for lectures only, £3 3s; for lectures and criticism lessons, £3 13s. 6d. Course B, or the discussion class, without criticism lessons, £1 11s. 6d.; with criticism lessons, £2 2s.

## IV. Nature Knowledge and V. General Elementary Science.

A class is held on Saturdays from 9 30 a.m. to 12.30 p.m. for King's Scholars not qualified in these subjects.

## VI. Drawing and Elementary Design

This course is arranged to meet the requirements of the students in the Day Training College, and consists of one lecture per week in the first and second years, together with at least one hour per week for practical work. The classes will be arranged after the beginning of the session.

Students wishing to prepare for any subjects which they may require in order to complete the Elementary Drawing Certificate of the Board of Education may do so by arrangement with the lecturer.

## VII. Reading and Recitation

Classes will be held at times to be arranged.

#### VIII. Music

For first and second year King's Scholars, on Thursdays, at 2 p.m. for choral music. Tutorial classes will be held at times to be arranged.

#### IX. Needlework

For first and second year King's Scholars, two hours a week, at times to be arranged.

# X. Physical Exercises

For King's Scholars, who require it, two half hours per week for each year, at times to be arranged.

# DEGREE, DIPLOMA, AND COURSES OF STUDY IN COMMERCE

Students in the Department of Commerce may take a three years' course for the degree of Bachelor of Commerce, or a two years' course for the diploma in Commerce, according to the ordinance and regulations which follow.

# Degree of Bachelor of Commerce

Ordinance.

- 1. The degree in Commerce shall be that of Bachelor of Commerce (B. Com.).
- 2. All candidates for the degree of Bachelor of Commerce shall be required to have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, and thereafter to have pursued approved courses of study for not less than three academic years.
- 3. The complete course of study for the degree of Bachelor of Commerce shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 4. Every candidate shall be required to pass two examinations, the Intermediate and the Final.
- 5. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
- 6. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee for the degree of Bachelor of Commerce, may determine.
- 7. All students shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly

<sup>1</sup> In 1608, they will begin on Wednesday, June 16. The latest day for entry will be MONDAY, MARCH 2, and the latest day for payment of fee Friday, May 1.

attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

#### Intermediate Course and Examination

- 8. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in five subjects, viz.:
  - i. Economics: the outlines of the economic history of England in the Nineteenth Century, and the general elementary principles of Economics
  - ii. The economic geography of the British Empire
  - iii. A modern foreign language (French or German)
  - iv, v. Tree of the following:
    - A second modern foreign language (French or German, whichever of the two has not been offered under iii)

Mathematics

European History from 1763,

and to pass in each of the subjects offered. The examination in each modern foreign language shall include an oral examination.

#### Final Course and Examination

- 9. Every candidate shall be required, except as provided in clause 10, to attend approved courses of study, extending over two years, and to pass an examination in each of the following principal subjects:
  - i. Economics: comprising (a) advanced general Economics (b) a special economic subject
  - ii. A modern foreign language (French or German)
  - A second modern foreign language (French or German, whichever of the two has not been offered under ii)
  - iv. Accountancy.

The examination in each modern foreign language shall include an oral examination. An essay shall also form part of the examination.

- 10. For the second modern foreign language or for  $\Lambda$ ccountancy candidates may substitute tvo of the following, studied each for one year as a subsidiary subject:
  - (a) The economic geography of the principal foreign countries
  - (b) Commercial Law
  - (c) Accountancy (unless Accountancy has already been offered as a principal subject).

Candidates may take the course of study in a subsidiary subject in the first year of the Final course, and present themselves at the end of that year for examination in such subject.

# Diploma in Commerce

For general regulations applicable to all diplomas, see page 166.

Regulations.

Candidates for the diploma must have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, or some other public examination, which in the opinion of the Senate is of sufficiently high standing, and must thereafter have pursued approved courses of study for not less than two years, and passed the prescribed examinations.

## First Year Course and Examination

**Economics** 

French or German

The economic geography of the British Empire

Accountancy

Mathematics *or* a second language *or* some other course to be approved by the Senate.

#### Second Year Course and Examination

# I. Compulsory subjects:

Economics, more advanced general course

French or German

The economic geography of the principal foreign countries

Accountancy, second year course

Commercial Law.

## II. Optional subjects:

Candidates for the diploma may also take, in their second year, an optional course in a second foreign language or a short course in the Textile, Engineering, or other Technological Department of the University.

# Courses of Study

The following syllabus explains more in detail the nature of the various courses. All the classes are open, as in other Departments of the University, to students who are not candidates for a degree or diploma.

#### I. Economics

#### Professor CLAPHAM

First Year Course.—Mondays, Wednesdays and Fridays, 2 p.m.

Second Year Course -Three hours a week at times to be arranged.

Third Year Course. - Times and hours to be arranged.

First Year: The first term will be given to the study of the modern commercial and industrial history of England, mainly in the nuneteenth century. This will lead up to the explanation of the leading features of the existing industrial and commercial organisation of the country. The main principles connected with the production and distribution of wealth, with wages, profits, interest and rent, and the values of goods and services will be dealt with. A preliminary study of the English monetary and banking system will be made, and attention will be given to foreign trade, the exchanges, and the relations of government to trade.

Second Year: This course will be of a more advanced character, and will be largely descriptive, though some of the more difficult general principles of Economics will also be dealt with. It will include such topics as the organisation of the chief markets; the money market; the Stock Exchange; price fluctuations and commercial crises and depressions; more advanced monetary and

banking questions; combinations, their characters and policies; trade unions, their aims and methods; railways and railway rates. The latter part of the course will be given to public finance: rates, taxes, debts, the Budget.

Third Year: In this year candidates for the B.Com. will study in detail some selected branch of Commerce or of Economics. Subjects will be chosen from time to time to suit the needs of various classes of students. Among these subjects will be: Foreign trade, transport (including railway economics), money and banking.

The course in Foreign trade includes such matters as: the foreign exchanges (advanced study of): foreign currencies; methods of invoicing and paying in international trade; shipping documents: marine insurance; the organisation of the leading wholesale markets: wheat, wool, cotton, iron, etc.; history of commercial policy and tariff systems: together with the economic theory of international trade.

Fee for the session for each three hours' course, £3 138. 6d.

## II. Economic Geography

## Professor CLAPHAM

First Year Course. The British Empire, Tuesdays and Thursdays, at 4 p.m.

Second (or Third) Year Course. The principal foreign countries, two hours a week at times to be arranged.

These two courses will supplement those in Economics. They will deal with the geographical basis of trade; with the situation, features, population, mineral, and other resources and industrial and commercial development of the various countries. Trade routes, including railway and canal systems, will be studied geographically. The import and export trades of each country will be examined; and also the distribution of the leading industries, the special features of each, the sources of its raw material and the markets for its goods. The courses will also include an examination of commercial policy in each of the c untries dealt with.

Fee for the session, for either course, £2 128. 6d.

#### III. Commercial Law

#### Professor Phillips

Tuesdays and Thursdays at 3 p.m. throughout the session. First Term: The general principles of the law of contract; the conception of contract in English Law; doctrine of consideration; statute of frauds; Sale of Goods Act—mistake—misrepresentation - fraud—illegality; assignment of contract, discharge of contract.

Second Term: Two independent short courses each of one hour a week: (a) Law of negotiable instruments; (b) Law of Bankruptcy.

Third Term: Two independent courses as in the second term: (a) Industrial Law or Law as to Employers and Employed; (b) Company Law.

Fee for the session, £,2 12s. od; for one term, £,1 5s.; for sections (a) or (b) in the second or third terms, 15s. each.

# IV. Accountancy

Mr. Shaw

First Year Course. - Wednesdays, 3 p.m.

Second Year Course. -Wednesdays, 4 p.m., and at a second hour to be arranged.

Third Year Course. Hours to be arranged.

First Year: The course will deal with (1) the genera principles of book-keeping, illustrated by the ordinary transactions of a merchant or manufacturer; (2) the specia principle of book-keeping by double entry; (3) the books themselves—various subsidiary books, leading up to the ledger; (4) the trial balance and the various methods of preparing it; (5) the preparation of the trading account, profit and loss account and balance sheet; (6) cheques, bills of exchange, and other important commercial documents.

Second Year: (1) Partnership accounts and other more complicated transactions; (2) the different forms of books and accounts suitable for various kinds of businesses; (3) the various methods of stock-taking; (4) the books and forms used for limited companies in connection with the share capital, debentures, &c., a study of the balance sheets of a number of companies; (5) departmental accounts; (6) the preparation of accounts required for income tax purposes.

Third Vear: (1) The analysis of accounts with a view to the computation of earnings and comparison of expenses; (2) costing and cost accounts; (3) sinking funds, provision for depreciation, &c.; (4) the various methods of payment of wages and of remuneration for management; (5) limited companies—public and private—their advantages and disadvantages; (6) fixed charges and the relation of selling prices to cost prices: (7) goodwill.

Fee for the First Year Course, £1 11s. 6d.; for the Second Year Course, £2 12s. 6d.

## French

Professor Barbier and Dr. Rudmose-Brown.

#### German

#### Professor Schuddekopf and Mr. Gough

In the degree course students in their first year will take the same work in languages as Arts students, including composition, translation at sight, dictation, conversation and the study of prescribed books. It is not thought desirable that the teaching should be specialised at this stage in the case of degree students.

During the second and third years, in preparation for the final examination, students will continue some parts of the general work and teaching, but will also read specially selected books of an economic or commercial character, and they will have opportunities of studying (1) correspondence, and (2) the institutions of the country whose language they are learning.

Diploma students will, as a rule, give special attention to correspondence and reading of a commercial character during both years of their course.

#### Mathematics

#### Professor Rogers

The course in Mathematics will be that for the Intermediate B.A. It is intended for students who propose to enter a career such as that of an accountant, in which a mathematical training may be of special value.

## **Evening Classes**

See under Evening Classes, page 360.

## DEGREES IN LAW

1. The degrees in Law shall be:

Ordinance

Bachelor of Laws (LL.B.) Doctor of Laws (LL.D.).

# Degree of Bachelor of Laws

- 2. All candidates for the degree of Bachelor of Laws shall be required to have passed the Matriculation examination, except those who may be exempted therefrom, and thereafter to have pursued approved courses of study for not less than three academic years.
- 3. The complete course of study for the degree of Bachelor of Laws shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 4. Every candidate shall be required to pass two examinations, the Intermediate and the Final
- 5. The Intermediate and Final examinations shall ordinarily be held in June of each year.<sup>1</sup>
- 6. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study in each of the subjects which they offer at the examination.

#### Intermediate Course and Examination

- 7. Every candidate shall be required, after passing the Matriculation examination, or after obtaining exemption therefrom, to attend during one academic year approved courses of study, and to pass in each of the following subjects:
  - i. Roman Law
  - ii. Elements of English Law
  - iii. The Law and Custom of the English Constitution
  - iv. Any subject included in the course for the Intermediate examination for the Ordinary degree of B.A or B.Com.

In 1908 they will begin about June 10. The latest day of entry will be MONDAY, MARCH 2, and the latest day of payment of fee will be Friday, May 1.

Provided that candidates who are already graduates of this or any other University within the United Kingdom shall not be required to attend classes or to be examined in iv.

Regulations.

Detailed subjects of study and of examination

#### ROMAN LAW:

The *Institutes* of Justinian, edited by Moyle. The subjects of Intestate Succession and Procedure are to be studied in outline only. Students must, from the notes in the text book and from lectures, make themselves familiar with the general history of Roman Law, and particularly with the state of the law in the time of Gaius.

#### ELEMENTARY ENGLISH LAW:

Stephen's Commentaries, Vols. i, ii, iii.

LAW AND CUSTOM OF THE ENGLISH CONSTITUTION:

Dicey's Law of the Constitution; Anson's Law of the Constitution, Parts I and II.

## OTHER SUBJECTS:

See the Regulations for Intermediate courses for the Ordmary degree of B.A. and the degree of B.Com.

#### Final Course and Examination

Ordinance.

8. Every candidate shall be required to attend during two academic years one or other of the following courses of study, and to pass in each of the subjects of the selected course:

#### Course 1.

- i. Roman Law
- ii. Jurisprudence
- iii. Public or Private International Law.

An essay paper shall be set at the Final examination for all candidates taking this course.

## Course II.

- Property, Real and Personal (including Conveyancing)
- ii. Equity (including Company Law)
- iii. Common Law (including Criminal Law and Bankruptcy)
- iv. Evidence and Procedure
- v. Jurisprudence.

# Detailed subjects of study and of examination Course A

Regulations.

#### ROMAN LAW:

The General History of Roman Law, including the History of the Roman Constitution; the Principles of Roman Law as stated in the Institutes of Gaius and Iustinian; a selected Title or selected Titles of the *Digest*. (Title selected for 1908 and 1909: Book XIX., Tit. I.De Actionibus Empti Venditi.)

The following books are recommended (not prescribed) in order to

show the scope of the course:

History of Roman Law: Roby's Introduction to the Study of the Digest; Sohn's Institutes of Roman Law; Muirhead's Law of Rome.

The Principles of Roman Law: Gaius, edited by Poste; Justinian, edited by Moyle; Roby's Roman Private Law; Gneist's Syntagma,

#### JURISPRUDENCE. (Historical and Analytical):

The following books are recommended (not prescribed) in order to show the scope of the course:

Austin's Jurisprudence; Clark's Practical Jurisprudence; Markby's Elements of Law; Holland's Jurispi udence; Maine's Ancient Law, Village Communities, Karly History of Institutions, and Early Law and Custom; Salmond's Jurisprudence.

## INTERNATIONAL LAW:

The following books are recommended (not prescribed) in order to show the scope of the course:

(a) Public: Lawrence's Principles of International Law; Oppenheim's International Law; Maine's Lectures on International Law; Pitt Cobbett's Leading Cases in International Law; Grotius's De Jure Belli et Pacis (edited by Whewell).

(b) PRIVATE: Westlake's Private International Law; Dicey's The Law of Domicile; Foote's Private International Jurisprudence; The Reported Cases.

#### Course B

In this course it is not thought necessary to give more detailed information than that contained in the Ordinance.

# Degree of Doctor of Laws'

1. The degree of Doctor of Laws shall be conferred by the University upon registered Bachelors of Laws of the University who shall be deemed by the Senate, after consider-Ordinance, ing a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

<sup>1</sup> In 1908 notice must be given and the fee must be paid not later than MONDAY, MARCH 2. The examination, if required, will begin on Wednesday, June 10.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of Faculties, also require candidates to pass such an examination as it may from time to time determine.

- 2. A Bachelor of Laws of the University may make application for the degree of Doctor of Laws in the sixth or any subsequent year from the date of his admission to the Bachelor's degree.
- 3. Such application shall be made in writing to the Registrar, and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any thesis, whether in print or in manuscript, which the applicant may desire to submit in support of the application.
- 4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six than six years from the date of admission to the Bachelor's degree.

Note. The following is an extract from the Consolidated Regulations of the Inns of Court:

"The Council may accept a degree granted by any University within the British Dominions, for which the qualifying evamination was in Law, as an equivalent for the examination in any of the subjects mentioned in Rule 43 (Roman Civil Law, the Law of Real and Personal Property, Common Law and Equity) other than Common Law and Equity."

Undergraduates of this University can keep their terms at any of the Inns of Court by dining in Hall any three days in each Term.

# DEPARTMENT OF LAW

# Supported by the Yorkshire Board of Legal Studies

Professor Phillips

Dr. Chapman Mr. Owen

The Law Department of the University of Leeds has been founded by the Yorkshire Board of Legal Studies, assisted by the Law Society of the United Kingdom, and is intended to afford systematic instruction throughout the academic year to students preparing for

1. The examinations for the degrees in Law of the University of Leeds,

2. The examinations of the Council of Legal Education, preparatory to call to the Bar, and

3. The examinations of the Law Society of the United Kingdom, qualifying for admission to practice as a Solicitor.

Most of the classes will also be found useful to candidates for the Law degree of the University of London.

Students pursuing the requisite course of study for a University degree in Laws, or for the examinations of the Council of Legal Education or of the Law Society of the United Kingdom, will, after registration payment of the entrance fee, be admitted to all the University lectures and classes that are arranged to meet their special requirements for an annual composition fee (paid in advance) of £8 8s. Students who are preparing for both a degree in Law and admission to the rolls as solicitors may attend all the lectures and classes for this double purpose for an annual composition fee of  $f_{ij}$  to ros. These composition fees do not cover any laboratory work that may be taken for the Intermediate examination. Those who desire to attend less than four lectures or classes may pay the separate fees of the classes selected. Candidates for the examinations of the University of Leeds must, however, comply with the University regulations as to the number of hours of weekly attendance to be given to the prescribed courses.

The courses will be arranged so as to give preparation for the Intermediate examinations in one session, and for the Final examinations in two sessions.

Professor Phillips would be glad to confer with Law students on all questions concerning their examinations, and to render them such assistance as might be in his power.

In cases where the hours of the lectures and classes are not stated, arrangements will be made in accordance with the requirements of individual students and the convenience of the majority

In connection with the lecture courses announced in the following pages, tutorial classes are held for which no additional fees are charged. Special tutorial classes are also provided for students preparing for the Final examinations of the Law Society, particulars of which are given on page 208.

# DEGREE OF BACHELOR OF LAWS Intermediate Course

#### I. Roman Law

Professor Phillips

Mondays, at 2 p.m., throughout the session. Fee for the course,  $f_2$  2s.

## II. Elements of English Law

Dr. Chapman

Mondays and Thursdays, at 4 p.m., throughout the session.

Fee for the course, £3 3s.

# III. The Law and Custom of the English Constitution

Professor Phillips

Mondays, at 3 p.m., throughout the session. Fee for the course, £2 2s.

## IV. Other Subjects

For particulars of classes in Greek, Latin, French, German, English Literature, English Language, Ancient History, Modern History, Logic, Mathematics, Physics, Chemistry, Geology, Economics, and Economic Geography, see Courses in Arts and Science.

# Final Course

Course I

## I. Roman Law

Professor Phillips

Mondays and Fridays, at 10.30 a.m., throughout the session.

Fee for the course, £3 3s.

# II. Jurisprudence

Professor Phillips

Mondays and Fridays, at 11.30 a.m., throughout the session.

Fee for the course, £3 3s.

## III. Public International Law

Professor Phillips

Tuesdays and Fridays, at 2 p.m., throughout the session. Fee for the course, £3 3s.

#### Course II

## I. Real and Personal Property

Dr. CHAPMAN

A course of lectures of one hour a week throughout the session will be given at times to be arranged.

Fee for the course, £2 2s.

## II. Equity (including Company Law)

Dr. Chapman

A course of lectures on the Principles of Equity, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 2s.

## III. (a) Common Law

Professor Phillips

During the session 1907-8, a course of lectures on the Law of Contract, of one hour a week throughout the session, will be given at times to be arranged, to be followed in the next session by a course on the Law of Torts.

Fee for each course, £,2 2s.

# III. (b) Criminal Law

Professor Phillips

A course of lectures on Criminal Law and Practice, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 2s.

# III. (c) Bankruptcy

Professor Phillips

A course of lectures on the Law and Practice of Bankruptcy, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course,  $\pounds$ , 2 2s.

#### IV. Evidence and Procedure

#### Dr. Chapman

A course of lectures on Legal Evidence and Procedure, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 28

## V. Jurisprudence

#### Professor Phillips

A course of lectures on Jurisprudence of one hour a week throughout the session will be given in the session 1908-9. Particulars will be given in next year's Calendar.

# EXAMINATIONS OF THE COUNCIL OF LEGAL EDUCATION

Classes I. and III. in the Intermediate course for the degree will prepare also for the examinations of the Council of Legal Education.

#### **EXAMINATIONS OF THE LAW SOCIETY**

## Intermediate Examination

## The Elements of English Law

Dr. Chapman

Mondays and Thursdays, at 4 p.m. throughout the session. Subject: Stephen's *Commentaries on the Laws of England*. This class will be mainly tutorial. Fee for the course, £3 3s.

# Final Examination

# Real and Personal Property

Dr. Chapman

A course of classes of one hour a week throughout the session will be held at times to be arranged.

Fee for the course, £,2 2s.

## Conveyancing

## Dr. Chapman

A class for tuition in the practice of Conveyancing will be held once a week throughout the session. The time of meeting will be arranged.

Fee for the class, £2 28.

#### Common Law

#### Professor Phillips

During the session 1907-8, a course of classes on the Law of Contracts, of one hour a week throughout the session, will be held at times to be arranged, to be followed in the next session by a course on the Law of Torts.

Fee for each course, £2 2s.

## Equity

### DR. CHAPMAN

A course of classes in the Principles of Equity, of one hour a week throughout the session, will be held at times to be arranged.

Fee for the course, £, 2 2s.

# Bankruptcy

## Professor Phillips

Classes will meet once a week during the session at times to be arranged.

Fee for the course, £,2 2s.

#### Criminal Law

## Professor Рипларя

Classes will meet once a week during the session at times to be arranged.

Fee for the course, £2 2s.

# Company Law

## Dr. Chapman

A course of lectures on the Law and Practice of Joint Stock and other Companies will be given during the first and second terms. The class will meet once a week, at times to be arranged.

Fee for the course, £1 11s. 6d.

## Equitable Procedure

#### Dr. Chapman

A class for tuition in the practice of the Chancery Division of the High Court of Justice will be held once a week during the third term, at an hour to be arranged.

Fee for the course, £1 1s.

## Legal Evidence and Procedure

#### Dr. Chapman

A course of lectures on the Law of Evidence and Procedure in the King's Bench Division of the High Court of Justice will be given throughout the session. The class will meet once a week, at an hour to be arranged.

Fee for the course, £, 2 25.

## Probate, Divorce, and Admiralty Law

#### Dr. Chapman

A class for tuition in the principles of Law and Procedure in Probate, Divorce, Admiralty, and Ecclesiastical Cases will be held once a week throughout the session, at an hour to be arranged.

Fee for the course, £,2 2s.

#### Tutorial Classes

In the case of students who are about to present them selves for the Intermediate or Final examination of the Law Society, there will be held during each term Tutorial Classes, the work of which will be revisionary. These classes will be open only to such students as have attended, or are attending, a complete course of classes in the Law Department of the University. The Tutorial Classes of each term will be complete in themselves.

Fee for the classes, £2 2s. per term.

N.B.—This fee is not included in any composition fees.

# LAW CLASSES IN DEPARTMENT OF COMMERCE

For particulars of lectures on Commercial Law and on the Law of Mortgage see pages 197 and 360 respectively.

## LAW CLASSES AT HULL

Mr. OWEN

During the first and second terms two lectures a week are given on Stephen's *Commentaries*, preparatory for the Intermediate examination of the Law Society, and two lectures a week on certain subjects preparatory for the Final examination of the Law Society.

Fee for each course, £1 1s.

#### EXTENSION LECTURES IN LAW

Extension lectures in Law subjects may be arranged by Local Committees. For particulars see the special prospectus of Extension lectures.

## DEGREES IN SCIENCE

Ordinance.

1. The degrees in Science shall be:

Bachelor of Science (B.Sc.)

Master of Science (M.Sc.)

Doctor of Science (D.Sc.).

#### DEGREE OF BACHELOR OF SCIENCE

- 2. The degree of Bachelor of Science shall be conferred either as an Ordinary degree or as a degree with Honours.
- 3. All candidates for the degree of Bachelor of Science shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

# Ordinary Degree of Bachelor of Science

- 4. The complete course of study for the Ordinary degree of Bachelor of Science shall be divided into two parts, called respectively the Intermediate course and the Final course.
- 5. Every candidate shall be required to pass two examinations, the Intermediate and the Final
- 6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
- 7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee concerned, may determine.
- 8. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

<sup>1</sup> In 1908 they will begin on Wednesday, June 10. The latest day for entry will be MONDAY, MARCH 2, and the latest day for payment of fees Friday, May 1.

9. The proficiency of candidates in laboratory work may be determined by inspection of their laboratory note books and the consideration of terminal or sessional reports from their laboratory teachers. Candidates may also be called upon to undergo a special practical examination at the Intermediate and Final stages of the degree course.

It shall always be in the power of the External Examiner to impose a practical or vivâ voce examination on such occasions as he may think desirable.

### Intermediate Course and Examination

ro. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in three subjects (one of which must be Mathematics or Physics) selected from the following:

Mathematics Physics Chemistry Biology<sup>1</sup> Geology,

and to pass in each of the subjects selected.

Candidates who propose to take an Applied Science (see section 15) in the Final course must pass in the subjects of the Intermediate course specified in section 20.

11. Every candidate is further required, at some time during his course, to take an additional subject at the Intermediate standard, selected from the following: Greek, Latin, French, German, English Literature, English Language, Ancient or Modern History, Logic, Economics, Economic Geography, Mathematics, Physics, Chemistry, Biology, Geology. In the case of candidates taking an Applied Science as a principal subject in the Final course (section 20 below), this list is increased by the addition of Applied Mechanics and General Engineering

vork of the candidates will be set as part of the Intermediate examination, and will be examined by the Examiners in English in co-operation with the Examiners in the scientific department concerned, and in the event of a student failing

<sup>• 1</sup> Biology is understood to include the Intermediate Courses in Zoology and Botany.

in this portion of the Intermediate examination, he shall be permitted to take it again at any subsequent Intermediate examination.

# Detailed subjects of study and of examination

Regulations

The scope of the work required may be understood from the following references to the courses of study preparing for this examination (see pages 236-259). The amount of laboratory work mentioned below is that ordinarily required. It may be varied on special grounds with the sanction of the Senate.

MATHEMATICS: Course III.

Physics: Course II. Laboratory work, three hours a week.

CHEMISTRY: Course I. Laboratory work, six hours a week.

Biology: Zoology I and Botany I. Laboratory work, six hours a week.

GEOLOGY: Course I. Laboratory work, three hours a week.

APPLIED MECHANICS: The work covered by Part I of Engineering Course I, together with graphical constructions, strength of materials, transmission of power and mechanics of machines as given in Engineering Course VI.

GENERAL ENGINEERING: Course II A, with Engineering Drawing.

GREEK, LATIN, FRENCH, GERMAN, ENGLISH LITERATURE, ENGLISH LANGUAGE, ANCIENT OR MODERN HISTORY, LOGIC: The same as for Intermediate Arts.

ECONOMICS, ECONOMIC GEOGRAPHY: The same as for Intermediate Commerce.

#### Final Course and Examination<sup>1</sup>

Ordinance

13. Every candidate will be required to attend approved courses of study either in two principal subjects, or in one principal subject and two subsidiary subjects, provided that the same subject shall not be taken both as a principal and a subsidiary subject. One of the subjects selected must be Mathematics, Physics, Chemistry, or an Applied Science.

In the Final examination there will be included, for translation into English, passages of French and German, relating to the principal subject or subjects of a candidate's degree course, and credit will be given for correct renderings of such passages. In the case of candidates who have passed

<sup>1</sup> In certain cases, students who began their course for the degree under the scheme previously in force may obtain permission to present themselves for the Final examination according to the regulations appearing in the Calendar for 1904-5.

neither in French nor in German at the Matriculation examination, and who have passed neither in French nor in German as an additional subject at the Intermediate standard, it shall be obligatory to satisfy the Examiners in the translation of one of the aforesaid passages from either French or German.

14. The course of study in each principal subject shall extend over at least two years beyond the Intermediate standard, and the course of study in a subsidiary subject shall extend over at least one year beyond the Intermediate standard.

# Principal Subjects

15. The principal subjects shall be selected from the following lists:

Pure Sciences:

Mathematics Physics Chemistry Zoology Botany Physiology Geology.

Applied Sciences:

Mechanical Engineering
Civil Engineering
Electrical Engineering
Mining Engineering
Gas Engineering
Fuel and Metallurgy
Agriculture

Applied Chemistry (Colour Chemistry and Dyeing)

Applied Chemistry (Chemistry of Leather Manufacture).

Every candidate taking Physics as a principal subject is required to have passed in Mechanics at the Matriculation examination, or to satisfy the Professor of Physics that he possesses an adequate knowledge of the subject.

In the event of Physiology being chosen as a principal subject, the second principal or the two subsidiary subjects shall be chosen from among the following: Physics, Chemistry, Zoology, Botany. In any case, six months' instruction in Human Anatomy will be required.

Every candidate taking an Applied Science as a principal subject is required to pursue one of the courses specified in

section 20.

## Subsidiary Subjects

16. The subsidiary subjects shall be selected from the following list:

Mathematics I (Pure)

Mathematics II (Pure and Applied)

**Physics** 

Chemistry

Zoology

Botany

Physiology

Geology

Human Anatomy

Bacteriology

Education (including the teaching of Elementary Science).

Mathematics I and II cannot be taken together as subsidiary subjects.

17. The following subjects shall rank as subsidiary subjects in connection with courses where Mechanical or Civil or Electrical or Mining Engineering is taken as a principal subject:

Mechanical Engineering Civil Engineering Electrical Engineering Mining Engineering.

- 18. The course of study in the subsidiary subjects may be taken either in the first or second year of the Final course.
- 19. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in the following June for examination in such subsidiary subject. When

Education is taken as a subsidiary subject, part of the examination may be taken at the end of each of the two years of the Final course. Candidates who fail to satisfy the examiners in such parts of the Final examination as they have taken at the end of the first year of their Final course shall be required to repeat this part of the examination at a subsequent June examination.

# Courses for candidates taking an Applied Science

20. Candidates selecting an Applied Science as a principal subject are required to attend courses of study and to present themselves for examination in definite subjects, as specified below:

# Mechanical Engineering:

Intermediate —Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Mechanical Engineering; subsidiary subjects, Mathematics, and either Physics or Civil or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

# Civil Engineering:

Intermediate—Mathematics, Physics and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final - Principal subject, Civil Engineering; subsidiary subjects, Mathematics, and either Geology or Mechanical or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Geology.

# Electrical Engineering:

Intermediate—Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Electrical Engineering; subsidiary subjects, Mathematics, and either Physics or Mechanical or Civil or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

# Mining Engineering:

- Intermediate —Mathematics, Physics, and Chemistry: additional subject at Intermediate standard, Applied Mechanics.
- Final—Principal subject, Mining Engineering; subsidiary subjects, two of the following: Mathematics, Geology, Mechanical, or Electrical Engineering, but candidates shall produce certificates of having satisfactorily attended prescribed courses of study in each of these four subjects.

## Gas Engineering:

- Intermediate—Mathematics, Physics, and Chemistry; additional subject at Intermediate Standard; Applied Mechanics.
- Final—Principal subject, Gas Engineering; subsidiary subjects, Chemistry and Engineering.

# Fuel and Metallurgy:

- Intermediate Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, Applied Mechanics.
- Final—Principal subject, Fuel and Metallurgy; subsidiary subjects, Chemistry and Mechanical Engineering.

# Agriculture :

- Intermediate—Physics, and two of the following: Chemistry, Biology, Geology; together with an additional subject at Intermediate standard (see section 11).
- Final—Agriculture, as principal subject, together with one of the pure sciences specified under section 15 above as the second principal subject, or two of the pure sciences specified under section 16 as subsidiary subjects.

# Applied Chemistry (Colour Chemistry and Dyeing):

Intermediate — Mathematics, Physics, and Chemistry; additional subject at Intermediate standard, General Engineering.

Final—Two principal subjects, viz.: Colour Chemistry and Dyeing, and Chemistry.

Candidates presenting Applied Chemistry (Colour Chemistry and Dyeing) may not present this subject until the end of the fourth year of study. Such candidates may take the examination in Chemistry at the end of the third year.

# Applied Chemistry (Chemistry of Leather Manufacture):

Intermediate—Three of the following: Mathematics, Physics, Chemistry, Biology, and an additional subject at Intermediate standard (see section 11). Final—Two principal subjects, viz.: Chemistry of Leather Manufacture, and Chemistry.

# Detailed subjects of study and of examination

The scope of the work required may be understood from Regulations. the following references to the courses of study preparing for this examination (see pages 236-259, etc.). The amount of laboratory work mentioned below is that ordinarily required. It may be varied on special grounds, with the sanction of the Senate.

## 1. Principal Subjects, studied for Two Years

MATHEMATICS: Courses V, VI, and VII.

Physics: Courses III and IV. Laboratory work, six hours a week for two sessions.

CHEMISTRY: Three of the Courses II, III, IV, and V(C). Laboratory work, twelve hours a week for two sessions.

ZOOLOGY: Course III, (A and B). Laboratory work, six hours a week for two sessions.

BOTANY: Course II, (A and B). Laboratory work, six hours a week for two sessions.

Physiology: Courses I, II, and IV.

GEOLOGY: Course II, and one of courses III, IV, and V. Laboratory work, six hours a week for two sessions, together with an approved course of Field Geology.

MECHANICAL ENGINEERING: Courses I, VI, VII, VIII, VIII a, VIII b, and IX.

- CIVIL ENGINEERING: Courses I, III, IV, VI (the parts relating to graphical constructions, strength of materials, air, transmission of power, and hydraulics), VII, (the parts relating to hydraulics and compressed air), VIII, VIII a, VIII b, and IX.
- ELECTRICAL ENGINEERING: Courses I, II, III, and IV. Laboratory work, nine hours a week for two sessions.
- MINING ENGINEERING: Courses I and II. Practical work, fifteen hours a week for one session.
- GAS ENGINEERING: Fuel and Metallurgy courses I, II, and III, together with the special course in By-Product Coking and on the Manufacture of Coal Gas. Laboratory work, six hours per week in the second year, and twenty-four hours per week in the third year.
- FUEL AND METALLURGY: Courses I, II, IV (A and C or B and C) together with the special course on By-Product Coking. Laboratory work, six hours per week in the second year, and twenty-four hours per week during the third year.
- AGRICULTURE: General Agricultural courses, and special courses in two of the following:—Agricultural Chemistry, course IX, practical work, six hours a week for four terms; Agricultural Botany, course XVI, practical work, thirty-six hours; Agricultural Zoology, practical work, thirty-six hours; Agricultural Geology, course XVIII, practical work, thirty-six hours; Veterinary Science, course XIII; Surveying, course XXIV, practical work, thirty-six hours. Practical work equivalent to 130 days of six hours each at the Manor Farm, Garforth.
- Applied Chemistry (Colour Chemistry and Dyeing):
  Courses I, II, III, and IV. Laboratory work, twenty-four
  hours a week for two sessions.
- APPLIED CHEMISTRY (CHEMISTRY OF LEATHER MANUFACTURE): Courses I, II, III, IV, V, and VI. Laboratory work, twelve hours a week for two sessions.
  - 11. Subsidiary Subjects, studied for One Year

MATHEMATICS I (PURE): Course VI.

MATHEMATICS II (PURE AND APPLIED): Courses V and VI. Physics: Course III. Laboratory work, six hours a week for one session.

CHEMISTRY: Courses II and III, or course IV, or course V (C), Laboratory work, twelve hours a week for one session

Zoology: Course III, either A or B. Laboratory work, six hours a week for one session.

BOTANY: Course II, either A or B. Laboratory work, six hours a week for one session.

PHYSIOLOGY: Courses I and IV.

GEOLOGY: Course II. Laboratory work, six hours a week for one session, together ith an approved course of Field Geology, HUMAN ANATOMY: Courses I (Part I) and II.

Bacteriology: Course I. Laboratory work, forty-five hours during one session.

EDUCATION: Parts I and II (see page 144). Instruction in the method of teaching elementary science will be regarded as equivalent to labora ory attendance (three year's course).

MECHANICAL ENGINEERING: Courses VI, VIII, and IX.

CIVIL ENGINEERING: Courses III, IV, VIII, and VIII a.

ELECTRICAL ENGINEERING: Course I. Practical work, six hours a week for one session.

MINING ENGINEERING: Course II. Practical work (either Mine Surveying, or Ore Dressing, or Assaying), six hours a week for one session.

# Degree of Bachelor of Science with Honours

1. The degree of Bachelor of Science with Honours will Ordinance be awarded in the following subjects:

Mathematics Physics Chemistry Zoology Botany Physiology Geology

Civil Engineering Mechanical Engineering

Electrical Engineering

Mining Engineering

Gas Engineering.

Fuel and Metallurgy.

Applied Chemistry (Chemistry of Leather Manufacture)

Applied Chemistry (Colour Chemistry and Dyeing)

Agriculture

2. Candidates will be required to present certificates of attendance upon approved courses of study extending over three or four years, as defined under the regulations for each Honours School. Such certificates of attendance shall only be granted when the candidate has regularly attended to the work of the classes and has acquitted himself satisfactorily at the class examinations.

- 3. Candidates for Honours must present certificates that they have satisfied the Examiners in such subjects as would fulfil the requirements of the Intermediate examination (including the additional subject), but they will be excused the examination in any subject which they will subsequently present at a more advanced standard. They must also attend the recognised classes and pass in one principal or two subsidiary subjects of the Final examination for the Ordinary degree, provided that such subjects shall not include the subject in which they are presenting themselves for Honours. It shall not be obligatory to pass simultaneously in the subjects thus prescribed, whether at the Intermediate or at the Ordinary Final standard.
- 4. A special examination in connection with each Honours School will be held at the end of the course of study, ordinarily in June of each year.\(^1\) Candidates who shall present evidence satisfactory to the Senate that they are qualified to enter upon a course of research may receive permisston to pursue such a course, and to offer a thesis of their work in place of part or the whole of the Honours examination; but no Candidate shall be excused the whole of the Honour examination unless he has satisfied the Examiners in the subject of his Honours School as a principal subject for the Ordinary degree, in addition to the one principal subject or two subsidiary subjects mentioned in the previous section.

Each application for the recognition of research work must be made to the Senate not later than the last day of the October preceding the Honours examination, together with a statement of the intended subject of research, and a summary of the course of work actually pursued must be sent in to the Examiners not later than the first day of the May preceding the Honours examination.

Candidates whose thesis does not satisfy the Examiners shall not receive the Honours degree, but may be recommended for the Ordinary degree in accordance with Section 7.

<sup>1</sup> In 1908, this examination will be in on Wednesday, June 10. The latest day for entry will be MONDAY, MARCH 2, and the latest day for payment of fees Friday, May 1.

- 5. In the Final examination there will be included, for translation into English, passages of French and German relating to the subject in which the candidate is presenting himself for Honours. In the case of candidates who have passed neither in French nor in German at the Matriculation examination, and who have passed neither in French nor in German as an additional subject at the Intermediate standard, it shall be obligatory to satisfy the Examiners in the translation of one of the aforesaid passages from either French or German.
- 6. Names of candidates who have passed the examination for the degree of Bachelor with Honours will be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.
- 7. Candidates who have not acquitted themselves so as to deserve Honours, but have reached the standard of the Ordinary degree, may be recommended for that degree.
- 8. Candidates who have passed the examination for the Ordinary degree of Bachelor of Science may (during the succeeding year or the two years immediately succeeding) proceed with the course of study in an Honours School.
- 9. No candidate for a degree of Bachelor of Science with Honours shall be admitted more than once to examination in the same Honours School, except under special conditions approved by the Senate; but the course shall in no case exceed four years, except in cases of illness, when a medical certificate satisfactory to the Senate will be required.
- 10. Students who have passed the Final examination in any of the Honours Schools shall be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University, provided that in the said other Honours School selected candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has clapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

11. Candidates who have passed the Second M.B. examination may, with the sanction of the Senate, and on furnishing certificates of having during the academical year following such Second M.B. examination attended the third year's, or during the two academical years following such Second M.B. examination of having attended the second and third year's course approved by the University for one of its Honours Schools in Science, present themselves for examination for a B.Sc. degree with Honours in such school.

Prescribed Courses of Study

Regulations.

The following regulations apply to candidates who have not passed the Intermediate examination before entering the University. Candidates who have already satisfied the requirements of that examination will be exempted from attendance at the Intermediate classes in the subjects in which they have passed. It should be noted that preparation for the additional Intermediate subject is not mentioned in the following schemes, as it may be taken at such time in the undergraduate course as is most convenient to the candidate.

Laboratory work will be required at each stage, except in Mathematics. The amount required in each subject will be prescribed by the Professor, with the sanction of the Board of Science and Technology.

In the following regulations the words *Intermediate course* or *examination* and *Final course* or *examination* indicate respectively the Intermediate and the Final courses or examinations for the Ordinary degree of Bachelor of Science

#### Mathematics1

Three years' course. First year: either Chemistry I. or Zoology I and Botany I, or Geology I, together with Mathematics V, VI, and VII, and Physics II. Second year: Mathematics VIII and IX, and Physics III and IV. Third year: Mathematics VIII and IX.

Four vears' course. First year: either Chemistry I. or Zoology I and Botany I, or Geology I, together with Physics II. Second year: Mathematics V, VI, and VII, and Physics III and IV. Third and fourth years: Mathematics VIII and IX.

The standard for the Honours degree in this subject may be taken as equivalent to two years' study beyond that required for the Ordinary degree.

#### Examination for Honours

Ten papers will be set on the following subjects:

#### PURE MATHEMATICS:

Pure Geometry, plane and solid

Algebra

Theory of Equations and Determinants

Plane Trigonometry

Spherical Trigonometry with simple applications to Astronomy

Analytical Geometry of two and of three dimensions

Elements of Projective Geometry

Differential Calculus with applications to plane curves

Integral Calculus

**Ordinary Differential Equations** 

Partial Differential Equations of the first order

Finite Differences.

#### APPLIED MATHEMATICS:

Dynamics of a particle

Statics

Attractions

Dynamics of rigid bodies

Hydrostatics

Elementary Hydrodynamics

Elementary Theory of Sound.

## Physics<sup>1</sup>

Three years' course. First year: Physics II and III, Mathematics V and VI, and Chemistry III. Second year: Physics IV and V, and Mathematics VI and VII. Third year: Physics VI.

Four years' course. First year: Physics II, Chemistry I, and Mathematics V and VI. Second year: Physics III and IV, and Mathematics VI and VII. Third and fourth years: Physics V and VI.

## Examination for Honours

Experimental and Theoretical Physics, requiring a knowledge of the Calculus, three papers.

One of the following:

Mathematical Physics, more advanced portions, one paper.

Physical Chemistry, one paper.

Technical Electricity, one paper.

Practical examination in the Physical laboratory extending over two days.

<sup>&</sup>lt;sup>1</sup> The standard for the Honours degree in this subject may be taken as equivalent to two years study beyond that required for the Ordinary degree.

## Chemistry

Three years' course. First year: Chemistry II or III, Mathematics III. and Physics II. Second and third years: Chemistry II or III, IV, and V, together with either (1) Mathematics V and VI, and Physics III, or (2) Physics III and IV.

First year: Chemistry I, Mathematics Four years' course. III. and Physics II. Second and third years: Chemistry II, III, and IV, together with either (1) Mathematics V and VI, and Physics III, or (2) Physics III and IV. Fourth year: Chemistry V.

#### Examination for Honoury

Inorganic Chemistry, one paper Organic Chemistry, one paper Physical Chemistry, one paper History of Chemistry, one paper One of the following subjects:

Electro-chemistry, one paper

One of the following branches of Applied Chemistry: Colour Chemistry and Dyeing, one paper Chemistry of Leather Manufacture, one paper Fuel and Metallurgy, one paper Agricultural Chemistry, one paper Chemistry of Food and Drugs, one paper.

A branch of Physics, one paper Mineralogy and Crystallography, one paper

Mechanical Engineering, one paper.

Practical examination in the laboratory, extending over three days.

## Zoology

First year: Zoology I and Botany I, Three years' course. together with two of the following, namely, Mathematics III, Physics II, Chemistry I, Geology 1. Second year: Zoology III (A and B), together with courses in one other principal subject or two subsidiary subjects. Third year: Honours work in Zoology.

Four years' course. First year: Zoology I and Botany I. together with two of the following, namely, Mathematics III, Physics II, Chemistry I, Geology I. Second and third years: Zoology III ( $\Lambda$  and B), together with courses in one other principal subject or two subsidiary subjects.

Fourth year: Honours work in Zoology.

#### Examination for Honours

One or more of the subjects named below may be selected, or the candidate may propose other subjects for the approval of the Senate. The subjects must be sent in not later than the last day of the October preceding the examination. A summary of the course of study actually gone through must be sent in to the examiners during the following April.

The Honours examination may be taken in the same year as the Ordinary B.Sc., or a year later. It will extend over three days, one of which will be occupied with practical work. There will be a viva voce examination.

A thesis, founded upon original research, may be sent in either alone, or together with one or more special subjects for examination.

Subjects, one or more of which may be selected for an Honours course in Zoology:

- (a) The comparative anatomy of some large and important group of animals.
- (b) Comparative embryology.
- (c) Palaeontology, with special reference to some large and important group of animals.

#### Botany

Three years' course. First year: Botany I and Zoology I, together with two of the following, namely, Mathematics III, Physics II, Chemistry I, Geology I. Second year: Botany II (.1 and B) together with courses in one other principal subject or two subsidiary subjects. Third year: Honours work in Botany.

Four years' course. First year: Botany I. and Zoology I, together with two of the following, namely, Mathematics III, Physics II, Chemistry I, Geology I. Second and third years: Botany II (A and B) together with courses in one other principal subject or two subsidiary subjects. Fourth year: Honours work in Botany.

#### Examination for Honeurs

One or more of the subjects named below may be selected, or the candidate may propose other subjects for the approval of the Senate. The subjects must be sent in not later than the last day of the October preceding the examination. A summary of the course of study actually gone through must be sent in to the examiners during the following April.

The Honours examination may be taken in the same year as the Ordinary E.Sc., or a year later. It will extend over three days, one (or more) of which will be occupied with practical work. There will be a viz. x vocc examination.

A thesis, founded upon original research, may be sent in either alone, or together with one or more special subjects for examination.

Subjects, one or more of which may be selected for an Honours course in Botany:

- (a) Special study of a selected group of plants
- (b) Ecology of a selected group
- (c) Geographical Distribution of Plants
- (d) Fossil Botany.

## Physiology

Three years' course. First year: three of the following, namely: Mathematics III, Physics II, Chemistry I, Zoology I and Botany I, Geology I. Second year: Physiology I and II, together with two of the following, namely, (1) Physics III, (2) Chemistry II, or III, or IV, or V(C), (3) Zoology III (A or B), (4) Bacteriology I, one of which shall be either Physics or Chemistry. Third year: Honours work in Physiology.

Four years' course. First year: three of the following, namely, Mathematics III, Physics II, Chemistry I, Zoology I and Botany I, Geology I. Second and third years: Physiology I and II, together with either (1) Physics III and IV, or (2) Chemistry II, III, IV, and V (C), or Zoology III (A and B). Fourth year: Honours work in Physiology.

As part of both the three years' and the four years' courses candidates will be required to have attended satisfactorily an approved course of instruction in Human Anatomy or in Comparative Anatomy.

Examination for Honours

Physiology, three papers

Practical examination, extending over two days.

## Geology

In this school there are alternative schemes of study, Scheme A—Physical, and Scheme B—Biological.

# Scheme A (Physical)

Three years' course. First year: Geology I, and two of the following, namely, Mathematics III, Physics II, Chemistry I, Zoology I and Botany I. Second and third years: Geology II, V, VI, and VII, with research, together with either (1) (a) Chemistry II or III, or (b) Chemistry IV, or 'c) Chemistry V (C), and Physics III, or (2) Chemistry II, III, IV, and V (C).

Four years' course. First year: Geology I, and two of the following, namely, Mathematics III, Physics II, Chemistry I, Zoology I and Botany I. Second and third years: Geology II and V, Physics III, and either (1) Chemistry II or III, or (2) Chemistry IV, or (3) Chemistry V (C). Fourth year: Geology VI and VII, with research.

## Examination for Honours

Geology, two papers

Petrology, one paper

Elementary Mineralogy, one paper

A special paper on the subject of research selected by the candidate Practical examination, extending over two days.

# Scheme B (Biological)

Three years' course. First year: Geology I, Zoology I and Botany I, together with either Mathematics III, or Physics II, or Chemistry I. Second year: Geology II and III, together with either (1) (a) Zoology III (A and B), or (b) Botany II (A and B), or (2) two of the following, namely (a) Chemistry II or III, or Chemistry IV, or Chemistry V (C), (b) Zoology III (A) or III (B), (c) Botany II (A) or II (B). Third year: Geology VI, with research.

Four years' course. First year: Geology I, Zoology I and Botany I, together with either Mathematics III, or Physics II, or Chemistry I. Second and third years: Geology II and III, together with either (1) (a) Zoology III (A and B), or (b) Botany II (A and B), or (2) two of the following, namely (a) Chemistry II or III, or Chemistry IV, or Chemistry V (C), (b) Zoology III (A) or III (B), (c) Botany II (A) or II (B). Fourth year: Geology VI, with research.

# Examination for Honours

Geology, one paper Palæontology, one paper Palæobotany, one paper

Special paper on the subject of research selected by the candidate • Practical examination extending over two days.

## Mechanical Engineering

Three years course. First year: Mathematics III and V, Physics II, Chemistry I, and Engineering I Second year: Mathematics VI and VII, Engineering VI, and Electrical Engineering I. Third year: Physics III (second term only), Engineering IV (Part I) and VII.

### Examination for Honours

Graphics and Descriptive Geometry, one paper Strength and Elasticity of Materials, one paper General Hydraulics, one paper Thermodynamics and Theory of Heat Engines, one paper Dynamics of Steam Engines and Machinery, one paper Mechanics and Kinematics, one paper Pure Mathematics, two papers. Applied Mathematics, two papers. Laboratory examination, two days.

A candidate's work done in the drawing office and the laboratory and the class examination results in Engineering during his three years' course will be taken into consideration.

# Civil Engineering

Three years' course. First year: Mathematics III and V, Physics II, Chemistry I, and Engineering I. Second year: Mathematics VI and VII, Geology I, and Engineering III and VI. Third year: Physics III (second term only), Engineering IV and VII.

#### Examination for Honoury

Graphics and Descriptive Geometry, one paper Strength and Elasticity of Materials, one paper General Hydraulics, one paper Theory of Complex Structures, one paper Surveying and Descriptive Engineering, one paper Water Engineering, Tidal and Railway Construction, one paper Pure Mathematics, two papers Applied Mathematics, two papers. Laboratory examination, two days.

A candidate's work cone in the drawing office and the laboratory, and the class examination results in Engineering during his three years' course will be taken into consideration.

## Electrical Engineering

Three years' course. First year: Mathematics III and V, Physics II, Chemistry I, and Engineering I. Second year: Mathematics VII, Engineering VI, and Electrical Engineering I. Third year: Mathematics IV, Physics III (second term only), and Electrical Engineering II, III, and IV.

### Examination for Honours.

Generation of Electrical Energy, one paper Transformation of Electrical Energy, one paper Distribution of Electrical Energy, one paper Design of Electrical Appliances, one paper Mechanical Engineering, one paper Heat Engines, one paper Pure Mathematics, two papers Applied Mathematics, two papers.

Practical examination in Electrical Engineering, two days.

A candidate's work done in the Electrical and Mechanical Engineering Drawing Office and Laboratory and the class examination results in Electrical and Mechanical Engineering during his three years' course will be taken into consideration.

# Mining Engineering

Honours in this subject will be awarded to candidates who, having obtained the Ordinary degree, with Mining Engineering as a principal subject, and being recommended as suitable to proceed with an Honours course, shall have spent one year in research or in the preparation of a thesis, attendance at the University during this fourth year not being compulsory. All candidates for Honours shall pass the same Mathematical examinations as if they had taken Mathematics as a principal subject.

# Gas Engineering: Fuel and Metallurgy

Honours in Gas Engineering or Fuel and Metallurgy will be awarded to candidates who, having obtained the Ordinary Degree, with either Gas Engineering or Fuel and Metallurgy as a principal subject, and being recommended as suitable to proceed with an Honours Course, shall have spent one year in research, or in the preparation of a thesis on some industrial process, to the satisfaction of the examiners, attendance at the University during this fourth year not being compulsory.

Honours in Gas Engineering or Fuel and Metallurgy may also be conferred upon candidates, who, having graduated in Science at this or an approved University, with Chemistry or Engineering as a principal subject, shall have subsequently (1) completed the course and passed the examination required for the diploma in Gas Engineering or Fuel and Metallurgy; and (2) spent an additional year in research in the Department to the satisfaction of the examiners.

# Applied Chemistry: Colour Chemistry and Dyeing

Honours in this subject will be awarded to candidates who, having completed the four years' course of study for the Ordinary degree, with Colour Chemistry and Dyeing as a principal subject, shall have specially distinguished themselves in the Final examination.

## Applied Chemistry: Chemistry of Leather Manufacture

Four years' course. First year: Chemistry I, together with two of the following, namely, Mathematics III, Physics II, Zoology I and Botany I. Second and third years: Physics III, Engineering II (A), Chemistry II, III, IV, and V (C), and Chemistry of Leather Manufacture I, II, III, IV, V, and VI. Fourth year: Honours courses or research in Chemistry of Leather Manufacture.

#### Examination for Honours

Physics and Chemistry of Leather Manufacture, one paper. Methods of Leather Manufacture, one paper. Laboratory Methods, one paper. Practical examination, three days.

# Agriculture

I ur years' course. First year: Three of the following, namely, Physics II, Chemistry I, Zoology I and Botany I, Geology I. Second and third years: the courses prescribed for candidates for the Final examination for the Ordinary degree who offer Agriculture as a principal subject, together with research work. Fourth year: Honours work, with research. Candidates are required to present themselves at the end of the third year for the final examination for the Ordinary degree.

The same rule shall a ply to an Honours student as to a student reading for an Ordinary degree, viz., six months of practical work equivalent to 130 days of six hours each

shall be spent at the Manor Farm, Garforth, after the Intermediate examination and before the completion of the third year. At the examination at the end of the third year the candidate for the Ordinary degree will be required to submit a report on an experiment he has himself conducted. The candidate for Honours will be required to submit an interim report on his special research.

#### Examination for Honours

The examination will extend over two days, part of the time being occupied by a viva voce examination at the Manor Farm, Garforth.

#### DEGREE OF MASTER OF SCIENCE<sup>1</sup>

I

Ordinance

- 1. The degree of Master of Science is conferred, on payment of the proper fee, upon registered Bachelors of Science, when of one year's standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.
- 2. Bachelors of Science who have graduated with Honours are not required to present themselves for any further examination for the degree of Master of Science.
- 3. Bachelors of Science who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination in *one* of the following subjects: Mathematics, Physics, Chemistry, Zoology, Botany, Physiology, Geology, Mechanical, Civil, Electrical, or Mining Engineering, Applied Chemistry (Colour Chemistry and Dyeing), Applied Chemistry (Chemistry of Leather Manufacture), and Agriculture. Certificates of attendance are not required.
- 4. The names of candidates who have passed the further examination for the degree of Master of Science are arranged in alphabetical order without distinction of classes.
- 5. Candidates who have prosecuted research, and who give satisfactory evidence thereof by the presentation of a thesis, may be excused part or the whole of the examination.

<sup>1</sup> In 1908 notice must be given and the fee must be paid not later than MONDAY, MARCH 2. The examination held under 1 3 will begin on Wednesday, 'une 10.

### П

Graduates or persons who have passed the Final examination for a degree of other approved Universities shall, if they present evidence satisfactory to the Senate that they are qualified to pursue a course of advanced study or research, be permitted to enter the University and to become candidates for the degree of M.Sc., without taking the B.Sc. degree, after not less than two years of such advanced study or research. Such candidates shall be required to give evidence to the Senate at the end of the first year of their period of study that their work has been satisfactory, and at the end of their second year they shall be required to present a dissertation, and to satisfy such further test, if any, as the Senate shall deem expedient.

#### Examination

#### Regulations, MATHEMATICS:

Analytical Geometry, Plane and Solid Differential and Integral Calculus Dynamics and Statics of a Particle Hydrostatics and Rigid Dynamics.

#### PHYSICS:

Experimental Physics, including Chemical Physics, two papers Experimental and Theoretical Physics requiring a knowledge of the Differential Calculus and of the elements of the Integra Calculus, one paper

Practical examination, one day.

#### CHEMISTRY:

Inorganic Chemistry, one paper Organic Chemistry, one paper

One of the following:

History of Chemistry and of Chemical Philosophy, one paper Physical Chemistry, one paper Mineralogy and Crystallography, one paper Technological Chemistry, one paper

Metallurgy, one paper

Sanitary Chemistry, one paper Physiological Chemistry, one paper Electro-Chemistry, one paper

Practical examination, one day.

#### Zoology:

Zoology and Comparative Anatomy (including the more important extinct forms) and Embryology, two papers Practical examination, one day.

#### BOTANY:

Botany, two papers Practical examination, one day.

#### Physiology:

Animal Physiology, three papers Practical examination, one day.

#### GEOLOGY:

Either Geology and the elements of Mineralogy, three papers, or Geology and Zoology, three papers
Practical examination, one day.

#### MECHANICAL ENGINEERING:

Dynamics of Machinery Stress, Strain and Elasticity Heat Engines and Thermodynamics Hydraulics.

#### CIVIL ENGINEERING:

Surveying and Descriptive Engineering Stress, Strain and Elasticity Complex Structures Hydraulics.

### ELECTRICAL ENGINEERING:

Details to be considered.

#### MINING ENGINEERING:

Details to be considered.

# Applied Chemistry (Colour Chemistry and Dyeing): Details to be considered.

Applied Chemistry (Chemistry of Leather Manufacture):
Details to be considered.

#### AGRICULTURE:

Details to be considered.

#### GAS ENGINEERING:

Details to be considered.

#### FUEL AND METALLURGY:

Details to be considered.

#### DEGREE OF DOCTOR OF SCIENCE 1

1. The degree of Doctor of Science is conferred by the Ordinance University upon registered Masters of Science of the University who shall be deemed by the Senate, after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

 <sup>1</sup> In 1908 notice must be given and the fee must be paid not later than MONDAY, MARCH 2. The examination, if required, will begin on Wednesday, June 10.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of the Faculties, also require candidates to pass such an examination as it may from time to time determine.

- 2. A Master of Science of the University may make application for the degree of Doctor of Science in the sixth, or any subsequent year from the date of his admission to the Bachelor's degree.
- 3. Such application shall be made in writing to the Registrar and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any memoir, whether in type or in manuscript, which the applicant may desire to submit in support of the application.
- 4. If the application be approved by the Senate, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

# DIPLOMAS IN SCIENCE AND TECHNOLOGY

Diplomas are granted by the University in the following subjects:

Coal Mining

Dyeing

Electrical Engineering

Fuel and Metallurgy

Gas Engineering

Leather Manufacture

Textile Industries: (1) Textile Design and Cloth Finishing; (2) Woollen and Worsted Spinning; (3) Textile Manufacturing.

For general regulations affecting the award of Diplomas, see page 166.

For regulations affecting each several diploma, see particulars of courses of study under the heading of the department concerned.

# OTHER TECHNOLOGICAL EXAMINATIONS

The examinations of the City and Guilds of London Technical Institute are held in the University in April, May, or June every year. Students of the University and others are admitted to the examinations. Each candidate is required, when entering his name for the examination with the Local Secretary, to pay to the City and Guilds Institute a fee of 1s, for each subject in which he desires to be examined. In some few subjects a higher fee is charged. Money prizes, medals, and certificates are awarded by the Institute. Among the subjects of examination, the following may be mentioned as specially suitable to the technical students of the University: -- Coal Tar Products, Gas Manufacture, Iron and Steel Manufacture, Leather Tanning, Dyeing (Silk, Wool, and Cotton), Bleaching and Printing, Textile Fabrics (Spinning and Weaving), Electrical Engineering, Mechanical Engineering, Mine Surveying. To obtain a full certiin any of the above-mentioned technological subjects candidates will be required to pass the Institute's examination in the Honours grade and also, in general, an examination in one or more of the Science and Art subjects included in the Regulations of the Board of Education, the subjects to be chosen from those most closely allied to the subject taken by the candidate. The Institute will accept in lieu of the examination by the Board of Education a certificate from the University stating that the candidate has attended approved courses of instruction at the University in the science subjects allied to the technological subject in which the full certificate is claimed, and has passed a satisfactory examination in such science subject. Candidates will also be qualified the full technological certificate who pass the Preliminary examination as well as the Ordinary and Honours examinations (written and practical) in any technological subject for which such a full course is provided by the Institute. For further particulars see the programme of the Institute (price, post free, 1s.)

Entries for the next examination will be received by the Local Secretary, Mr. G. R. Brench, University of Leeds, not

later than Monday, March 2, 1908.

## Courses in Science

# **MATHEMATICS**

Professor Rogers
Mr. Watson

#### I. Matriculation Course

Mondays, Wednesdays, and Fridays, at 2 p.m.

The subjects are elementary geometry, algebra, and arithmetic, as required for the Matriculation examination. Books will be recommended by the Professor.

Fee, £3 13s. 6d.

## II. First Year Course for Engineers

Mondays, Wednesdays, and Fridays, at 3 p.m.

This course will treat of algebra, elementary trigonometry, and other subjects useful to engineering students.

Fee, £3 13s. 6d.

# III. Intermediate Course in Pure Mathematics

Mondays, Wednesdays, and Fridays, at 2 pm.

Students reading for the Intermediate B.Sc. examination attend for all three hours, students reading for the Intermediate B.A. examination attend on Mondays and Wednesdays only.

Fee for three hours a week, £3 13s. 6d.; for two hours £2 12s. 6d.

#### Books recommended

Hobson and Jessop, Elementary Trigonometry (Cambridge) Knott, Four-figure Mathematical Tables (Chambers, 4d.) Gibson, Introduction to one Calculus (Macmillan, 3s. 6d.)

## IV. Second Year Course for Engineers

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

• The subjects are graphical methods, differential and integral calculus.

Fee, £,3 13s. 6d.

Book recommended

Saxelby, A Course in Practical Mathematics (Longmans and Co, 6s. 6d.)

## V. Final Course in Applied Mathematics (First Year)

Tuesdays and Thursdays at 11.30 p.m.

Elementary statics, dynamics, and hydrostatics.

Fee, £,2 12s. 6d.

Book recommended

Jessop, Elements of Applied Mathematics (Bell, 4s. 6d.)

# VI. Final Course in Pure Mathematics

Mondays, Wednesdays, and Fridays, at 11.30 a.m.

Subjects: co-ordinate geometry, differential and integral calculus.

Students taking Mathematics (i) as Principal Subject (p. 217), (ii) as the Subsidiary Subject, entitled Mathematics I (p. 218), attend for all three hours; students reading for (i) Arts Courses (pp. 144 and 145), (ii) Science Subsidiary Course, entitled Mathematics II (p. 218) attend on Mondays and Wednesdays only.

Fee, £3 138. 6d.

Books recommended

Lamb, Infinitesimal Calculus (Cambridge)

Smith, Conic Sections (Macmillan)

# VII. Final Course in Applied Mathematics (Second Year)

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

Subjects: statics, dynamics, and hydrostatics Books will be recommended by the Professor.

Fee, £3 138. 6d.

## VIII., IX. Honours Courses in Pure and Applied Mathematics

Courses of lectures of three hours a week each in Pure and Applied Mathematics will be delivered to students reading for Honours in Mathematics. Hours of meeting will be arranged.

Fee for each course, £, 3 13s. 6d.

#### **PHYSICS**

Chair endowed in 1884 by public subscription in memory of the ate Lord Frederick Cavendish, first President of the

## Yorkshire College

Professor Stroud

Mr. ALLEN

Mr. SHORTER

Mr. Carlton Mr. Sykes

#### LECTURE COURSES

### 1. Matriculation Course, Elementary Mechanics

Experimental Lectures: Tuesdays and Thursdays, at 9.30 a.m., throughout the session.

Exercise Class: Saturdays, at 9.30 a.m., throughout the session.

This course will embrace the subject of Mechanics, and is framed to meet the requirements of candidates for the Matriculation examination.

The subjects will be as follows: properties of matter, composition and resolution of forces, the simple machines, the balance, centre of gravity, friction, laws of motion, falling bodies, laws of fluid pressure, specific gravity, Boyle's law, the barometer, the air pump, the siphon.

Fees for the whole course, £3 13s. 6d; for the experimental lectures only, £2 12s. 6d.; for the exercise class only, £1 5s.

Book recommended

Pinkerton's Mechanics and Hydrostatics (Blackie & Son, 3s. 6d.).

#### II. Intermediate Course

Experimental Lectures: Wednesdays and Fridays at 3 p.m., or Wednesdays and Fridays at 4 p.m.

Exercise Class: Mondays at 3 p.m., or Thursdays at 9.30 a.m., throughout the session. Students taking the whole course will therefore attend either on Mondays, Wednesdays, and Fridays at 3 p.m., or on Wednesdays and Fridays at 4 p.m., and Thursdays at 9.30 a.m.

This course will be divided into two parts:

<sup>&</sup>lt;sup>1</sup> Candidates for the First examination in Medicine, or the Intermediate Science or Preliminary Scientific (M.B.), ondon, should refer to the course given on page 304.

Part I will consist of experimental lectures describing and exhibiting the chief phenomena of Electricity and Magnetism.

Part II will treat of *Mechanics* – Work, centrifugal force, the pendulum, elasticity; *Heat* -Temperature, expansion, change of state, relations of heat and work, mechanical equivalent of heat; Acoustics—Nature of sound, wave motion. velocity of sound, musical intervals, vibrations of rods and strings; Light—Velocity of light, methods of measuring the intensity of light, the spectrum, reflection and refraction at spherical surfaces, achromatism.

Fees for the whole course, the same as for the first yea course; for Parts I or II only,  $\pounds_2$  2s.; for the experimental lectures of Parts I or II only, £,1 11s. 6d.

Books recommended

Part I. S. P. Thompson, Electricity and Magnetism (Macmillan, 48. 6d.)

Jones, Examples in Physics (Macmillan, 3s. 6d.)

Part II. Jones, Sound, Light, and Heat (Macmillan)

## III. Final Course (Subsidiary)

Lectures: Mondays and Fridays, at 10.30 a m., through out the session.

This course is designed to meet the requirements of students taking Physics as a subsidiary subject in the Final B.Sc. examination. It also forms the first half of the course for students taking Physics as a principal subject in that examination.

Fee, £,2 12s. 6d.

Book recommended

Watson, *Physics* (Longmans 10s. 6d.)

Allan, Examples in Physics (Arnold, 1s. 6d.) The following works may also be usefully consulted:

Poynting & Thomson, Properties of Matter, Heat, and Sound Edser, Heat and Light

Hadley, Electricity and Magnetism

# IV. Final Course (Principal)

Lectures: Wednesdays, at 10.30 a.m., throughout the session, and at some other hour to be arranged when the class meets.

This course, in addition to III above, is designed to meet the requirements of students taking Physics as a principal subject in the B.Sc. examination. Students taking this course are required to have previously gained at least a second class in each terminal examination in Course III, or in default are required to take Course III again concurrently with this course, unless specially exempted by the Scnate.

N.B.—A practical acquaintance with the principles of the Differential and Integral Calculus is absolutely essential for students taking this class.

Fee, £2 128. 6d.

Fee for courses III. and IV. taken together,  $f_{4}$  14s. 6d.

### V, VI. Honours Course

Three lectures a week throughout the session, at times to be arranged.

This will form a continuation of the previous course, and will treat the subject mainly from the mathematical standpoint. It is designed to meet the requirements of candidates for Honours in Physics. The complete course extends over two sessions.

Fee, £3 13s. 6d. per session.

N.B. The class will meet for the first time on Thursday, October 3, at 11.30 a.m., when times will be arranged for the lectures to suit the convenience of students attending the class.

#### PHYSICAL LABORATORY

The Physical laboratory will be open from 9.30 a.m. to 1 p.m., and from 2 to 5 p.m. (except on Saturdays), for instruction in the methods of performing physical experiments.

Students preparing for the Intermediate B.Sc. examinations or for the First examination in Medicine will require to devote at least three hours per week throughout the session to practical work.

A student preparing for the Final B.Sc. examination with Physics as a principal subject is required to devote one day per week for two sessions to practical work.

A student taking Physics as a subsidiary subject is required to devote one day per week for one session to practical work.

The laboratory will be open for the different classes of work according to the following table:

	9.30-12.30.	2—5.
М.	Honours.	Final.
— — Ти.	Final.	Intermediate.
W.	Honours.	Final.
Th.	Final.	Intermediate.
F.	Honours.	Final.
s.	Intermediate.	

Book recommended for Intermediate Course: Schuster & Lee *Intermediate Physics* (Macmillan).

For fees, see page 120.

# CHEMISTRY 1

Professor Smithells Professor Cohen

Dr. Dawson Mr. Lowson

Mr. Marshall Mr. Perkins Mr. Calam. Mr. King.

#### LECTURE COURSES

# I. General Course of Chemistry

The lectures of this course are given throughout the session, on Mondays, Wednesdays, and Fridays, at 11.30 a.m. In addition a tutorial class will be held one hour weekly throughout the session.

t Candidates for the First examination in Medicine, or the Intermediate Science or Preliminary Scientific (M.B.), London, should refer to the course given on page \$94.

The course is divided into two parts:

Part I will comprise lectures on the general properties of matter; chemical combination and decomposition; preparation, classification, and chemical behaviour of the chief elements and their compounds; chemical theory treated in an elementary manner.

Part II (third term) will form an introduction to organic chemistry.

Fees for the whole course (including tutorial class),  $\pounds_4$  4s.: for part I,  $\pounds_3$  13s. 6d.: for part II,  $\pounds_1$  1s.

# II. Inorganic Chemistry <sup>1</sup> Advanced Course—Metals

Mondays, Wednesdays, and Fridays, at 9.30 a.m., throughout the session.

This class will deal chiefly with the metals and their compounds. A previous general knowledge of chemistry is necessary.

Fee, £3 138. 6d.

# III. Inorganic Chemistry Advanced Course—Non-Metals

Tuesdays, Thursdays, and Saturdays, at 9.30 a.m., throughout the session.

This class will deal chiefly with the chemistry of the non-metallic elements. A previous general knowledge of chemistry is necessary

Fee, £,3 13s. 6d.

## IV. Organic Chemistry

Tuesdays, Thursdays, and Saturdays, at 12 (noon) throughout the session.

This course is intended for second year students, or for those who have already some knowledge of chemistry.

Fee, £3 13s. 6d.

<sup>1</sup> It will be advisable, as a rule, for students to take course II before course III. 11 this order is not essential.

#### V. Honours Courses

# A. Organic Chemistry

Professor Cohen

Mondays, Wednesdays, and Fridays, at 12 (noon), during the first and second terms.

Fee, £2 12s. 6d.

# B. History of Chemistry

Professor Cohen

Mondays, Wednesdays, and Fridays at 9.30 a.m., during the first term.

Fee, £1 118. 6d.

### C. Physical Chemistry

Dr. Dawson

Mondays, Wednesdays and Fridays, at 9.30 a.m. during the second and third terms

Fee, £2 128. 6d

## D. Electro-Chemistry

Dr. Dawson

Tuesdays at 9.30 a.m. Fee,  $\mathcal{L}_{1}$  11s. od.

# VI. Chemistry of Food and Drugs

Mr. Lowson

During the third term a special class will be held for those students who are taking the Final examination of the Institute of Chemistry in Branch E (Food and Drugs).

Fee, £,2 25.

#### PRACTICAL CHEMISTRY

# 1. General Laboratory Courses

The object of the laboratory courses is to enable the student to obtain a practical acquaintance with chemical science, so as to fit him to conduct chemical analysis, to make original investigations in Chemistry, and generally to become qualified to apply the science to the arts and

manufactures. It is necessary that each laboratory student should attend or should have attended the General or the Advanced courses in Chemistry and the course in Organic Chemistry.

In the Chemical laboratories instruction is given in the general modes of preparing chemical compounds, inorganic and organic, in the qualitative and quantitative analysis of minerals and commercial products, in water analysis, gas analysis, and in the various branches of physical chemistry. It is necessary, however, that students wishing to pursue any special branch of practical work shall first have thorough training in the general principles and method of chemical manipulation and analysis.

Each student will be furnished with a separate working table, a set of re-agents, water and gas, and will be required to provide himself with a regulation set of apparatus on entry, and also, if necessary, a few of the more costly tests, and any expensive materials which he may need for the purposes of original investigation. Apparatus of a special or expensive character may be obtained on loan, subject to such conditions as may be prescribed by the Professor.

For fees see page 120.

Students taking the course for the First examination in Medicine or the Preliminary Scientific (M.B.) of the University of London, must attend at the hours specified on page 304.

# 2. Practical Course in Sanitary Chemistry

This course is arranged on the lines laid down by the General Medical Council and to suit the requirements of Medical Officers of Health.

The course will be held during the third term of the session on Tuesdays and Thursdays, from 2 to 5 p.m.,<sup>2</sup> and will include practical instruction or demonstrations in the sanitary examination of water, air and food, and on the properties of gases, the laws of heat and the use of meteorological instruments.

<sup>1</sup> For the convenience of students, a supply of apparatus is kept at the University, and may be purchaged from the laboratory steward.

<sup>2</sup> These hours are subject to re-arrangement.

Instruction will be given in:

Water.—Qualitative examination, quantitative examination, estimation of free and albuminoid ammonia, oxygen consumption, chlorine, nitrates and nitrites, total solids, temporary and permanent hardness, metallic impurities.

Air.—Qualitative examination of foreign gases, quantitative determination of carbon dioxide.

Food.—Qualitative or quantitative examination of milk, butter, tea, coffee, sugar, alcoholic beverages.

The Properties of Gases.—Expansion, weight, pressure, diffusion, ventilation.

The Laws of Heat.—Expansion of liquids and solids, temperature, latent and specific heat, liquefaction, evaporation, ebullition, radiant heat.

The Use of Meteorological Instruments.—Thermometers (wet and dry bulb), barometers, hygrometers, anemometers, analysis of weather reports and meteorological charts.

Fee, £5 5s.

## Course for Students not taking a Degree

The following course of instruction is recommended to students of Chemistry who do not propose to take a University degree.

First Year:

Chemistry Lectures: General Course or Advanced Course II.

Chemical Laboratory, 3 days per week.

Mathematics 111.

Physics II.

French or German.

Fee for the First Year Course (including Entrance fee of £1 1s. and Union fee of 1os. 6d.), with General Chemistry, £28 18s. 6d.; with Advanced, £28 9s.

Second Year:

Chemistry Lectures: II, III and IV.

Chemical Laboratory, 3 days per week.

Physics III.

French or German.

Fee for the Second Year Course (including Union fee), £30 14s. 6d.

## Third Year:

Chemistry Lectures: Honours Courses A, C and D.

Chemical Laboratory, 3 days per week.

Physical Laboratory, 1 day per week.

One of the following: Elementary Engineering, Metallurgy, Geology

Fee for the Third Year Course (including Union fee), about £,30.

### INSTITUTE OF CHEMISTRY

Students desirous of obtaining the Associateship of the Institute of Chemistry are required to pass an approved preliminary examination (such as the Matriculation examination) and further to attend:

- 1. A course of study during three years in practical and theoretical Inorganic and Organic Chemistry, the practical work to occupy at least fifteen hours per week.
- 2. At least fifty lectures in Physics, with at least 100 hours in the Physical laboratory.
- 3. A course in Mathematics up to the standard of the Intermediate examination for the degree of Bachelor of Science.
- 4. A course of instruction in one of the following optional subjects: (a) Advanced Mathematics, (b) General Chemical Engineering, (c) Metallurgy, (d) Geology and Mineralogy, (e) Elementary Physiology, (f) Bacteriology.

The above non-degree course is recommended as a convenient arrangement of subjects. For fuller details the Regulations of the Institute<sup>1</sup> should be consulted.

# ZOOLOGY

Professor Garstang
Mr. Taylor Mr. Unwin

# I. Intermediate Course: Biology<sup>2</sup>

Lectures on Mondays, Wednesdays and Fridays during the first term, and on Mondays and Wednesdays during

<sup>1</sup> To be obtained from the Secretary, Institute of Chemistry, 30, Bloomsbury Square, London W.C.

<sup>2</sup> This course will prepare for the examination of the University in Elementary Biology (see Time-table on page 304). It is recognised by the Royal College of Surgeons as meeting its requirements in Comparative Anatomy.

the second term, at 10.30 a.m. Demonstrations and Laboratory work on Mondays, from 2 to 5 p.m., and Tuesdays, from 9.30 a.m. to 12.30 p.m., during the first term, and on Mondays, from 2 to 5 p.m., during the second term.

The course includes:

The elementary study of the Rabbit (omitting the reproductive organs), Frog, Dogfish (omitting the renal and reproductive organs), Earthworm, Hydra, Paramecium, Vorticella, Amœba.

The development of the Chick up to the fourth day; the development and transformation of the Tadpole.

The microscopic study of epithelia and blood.

Books recommended

Marshall, The Freg (Cornish, 3s. 6d.)

Marshall & Hurst, Practical Zeology (Smith, Elder & Co., 10s. 6d.)

Fee, £5 5s. (including laboratory practice).

Each student is required to provide himself with a microscope, a pocket lens, a dissecting case (a suitable case is made for Reynolds & Branson, Leeds, and sold at 13s. 6d) a biological drawing book (Jackson, Leeds, 1s.), two razors and a strop.

Any of the following microscopes will suffice for the biological work. The Professor of Physiology recommends students who intend to take Practical Physiology in a later part of their course to procure one of the first three.

- 1. Swift's College Stand, with Zeiss D objective in place of  $\frac{1}{4}$  in., £6 10s.
- 2. Swift's College Stand, with Zeiss DD in place of \{\frac{1}{2}\text{ in.,} \frac{1}{2}\text{ zs.}
  - 3. Leitz' Stand, II. $\theta$ , with objectives 3 and 7, £6 5s.
- 4. Swift's College Stand, with Swift's 1 in. and  $\frac{1}{6}$  objectives, £5 5s.

Every miscroscope should be fitted with a ruled circle in the eyepiece for drawing. Messrs. Reynolds & Branson will supply such a circle for 7s. 6d., or 6s. 6d. when included with a microscope.

#### Revision Class

A Revision Class in Zoology will be held in the third term, meeting on Thursdays at 11.30 a.m. Practical work on Fridays from 9.30 to 11.30 a.m.

Fee, f, 1 is.

# II. Medical Biology

During the first term the lectures will be given on Mondays, Wednesdays and Fridays at 10.30 a.m.; demonstrations and laboratory work on Mondays from 2 to 5 p.m., and Tuesdays from 9.30 a.m to 12.30 p.m. During the second term the lectures will be given as above: laboratory work on Tuesdays from 10.30 a.m. to 12.30 p.m., and Fridays, from 2 to 4 p.m.

Fee, £5 5s. (including laboratory practice).

Books recommended

Marshall, The Frog (Cornish, 3s. 6d.)

Marshall & Hurst, Practical Zeology (Smith, Elder & Co., 10s. 6d.) Parker, Lessons in Elementary Biology (Macmillan & Co., 10s. 6d.)

## III. Final Course: Zoology

Lectures three times a week, at hours to be arranged with the class.

Courses A and B will be taken alternately, each occupying one session. Either will rank as a subsidiary course for the degree.

A. The structure and life-history of selected animals: about half the classes of the animal kingdom; the development of selected animals; extinct vertebrates and mollusks; the freshwater fauna.

B. The structure and life-history of selected animals (a different selection from those in course A); the remaining classes of the animal kingdom; the development of selected animals; a few remarkable extinct invertebrates; the geographical distribution of animals in connection with the physical history of the continents.

Fee for each session, £5 5s. Courses of laboratory work, occupying from nine to twelve hours per week, at the choice of the student, will be provided in connection with these courses of lectures. For fees, see page 120.

The two years' course will prepare for the Zoology of the Final B.Sc. examination.

A course of lectures and laboratory work will be arranged to suit the requirements of students who intend to offer themselves for Honours or for the M.Sc. in Zoology.

## IV. Economic Entomology

Lectures and laboratory work, on Thursdays at 11.30 a.m., and on Fridays from 9.30 to 11.30 a.m. during the first term. The course will commence on October 17.

The structure and classification of insects will be treated in an elementary way, and the life-history of certain types will be followed out. It is expected that attention to the work of the class will qualify any student to read with advantage special memoirs on injurious insects.

Special arrangements will be made for the benefit of students desirous of taking a fuller course of instruction in Economic Entomology, either for teaching purposes or to qualify for appointments.

Fee, f, 1 11s. 6d.

Book recommended
Miall, Injurious and Useful Insects (Bell & Sons, 3s. 6d.)

# V. Nature Knowledge

Mr. Taylor

The class will meet on Saturdays from 9.30 a.m. to 12.30 p.m., beginning October 5, and will extend throughout the session.

Natural objects will be studied in the laboratory, and afterwards discussed in the class-room.

Fee, £3 13s. 6d.

# VI. Zoological Laboratory

The Zoological laboratory will be open daily from 9.30 a.m. to 5 p.m. (Saturdays, from 9.30 to 12.30).

For fees see page 120.

Each laboratory student, or student taking a practical class in Biology, will be required to use his own miscroscope and dissecting instruments. Microscopes may be had on loan from the University at the rate of 2s. 6d. each per term, to be paid in advance. The regulations hung up in the Biological laboratory are to be observed by all students in this department.

#### BOTANY

#### Professor Blackman

Dr. Smith Mr. Walker

## I. Intermediate Course: Biology<sup>1</sup>

Lectures on Fridays at 10.30 a.m., during the second term, and on Mondays and Wednesdays at 9.30 a.m., Tuesdays and Thursdays at 2 p.m., during the third term. Demonstrations and laboratory work on Tuesdays from 9.30 a.m. to 12.30 p.m., during the second term, and on Mondays and Wednesdays, 10.30 to 11.30 a.m., Tuesdays and Thursdays, from 3 to 5 p.m., during the third term. Also, for candidates taking the London Intermediate Science examination, at times to be arranged, during the third term.

The course includes:

The elementary study of Chlamydomonas, Pleurococcus, Ulothrix, Spirogyra, Vaucheria, Bacteria, Saccharomyces, Eurotium, Pteris, Aspidium, and the flowering plant.

The elements of plant anatomy and plant physiology.

The classification and adaptations of flowering plants, as illustrated by examples of Ranunculaceae, Cruciferae, Caryophylleae, Leguminosae, Rosaceae, Umbelliferae, Primulaceae, Labiatae, Compositae, Liliaceae, Amaryllideae. Fee, £5 5s. (including laboratory practice).

#### Books recommended

Scott, Structural Botany, Parts I and II (Black, 7s). Simpson, Families of British Flowering Plants (Jackson, 1s.).

Each student is required to provide himself with a microscope, a pocket lens, a dissecting case (a suitable case is made for Reynolds & Branson, Leeds, and sold at 13s. 6d.), a biological drawing book (Jackson, Leeds, 1s.), two razors and a strop.

<sup>1</sup> This course will prepare to the examination of the University in Elementary Biology (see Time table on page 304).

Any of the following microscopes will suffice for the biological work. The Professor of Physiology recommends students who intend to take Practical Physiology in a later part of their course to procure one of the first three.

1. Swift's College Stand, with Zeiss D objective in place

of  $\frac{1}{4}$  in., £6 10s.

2. Swift's College Stand, with Zeiss DD in place of  $\frac{1}{4}$  in., £7 28.

3. Leitz' Stand, II.b, with objectives 3 and 7, £,6 5s.

4. Swift's College Stand, with Swift's 1 in. and  $\frac{1}{6}$  objectives, £5 5s.

Every microscope should be fitted with a ruled circle in the eyepiece for drawing. Messrs. Reynolds & Branson will supply such a circle for 7s. 6d., or 6s. 6d. when included with a microscope.

## II. Final Course: Botany

Lectures on Mondays, Wednesdays and Fridays throughout the session. Courses A and B will be taken alternately, each occupying one session. Either will rank as a subsidiary course for the degree.

A. Algæ and Bryophyta: classification, and life-histories of representative groups.

Gymnosperms: morphology, anatomy and classification of principal groups; distribution in space and time.

Important natural orders of flowering plants.

Physiology of nutrition and œcology of the leaf.

B. Fungi: classification, and life-histories of representative groups.

Pteridophyta: structure and relationships of the princi-

pal groups (ferns, lycopods, etc.).

Angiosperms: the morphology of the flower, and physiology of reproduction. The principles of geographical distribution, and eccology.

Physiology of the plant axis: growth and response to stimulation. Cytology.

Fee for each session,  $\pm$ , 5 5s.

An introductory course in Fossil Botany is offered to candidates who take Botany as a principal subject.

A course of laboratory work on one of the above courses will be provided; for fees see page 120.

The two years' course will prepare for the Botany of the Final B.Sc. examination.

A course of lectures and laboratory work will be arranged to suit the requirements of students who intend to offer themselves for Honours or for the M.Sc. in Botany.

## III. Natural History for Agricultural Students

Lectures and laboratory work on Mondays, 10.30 a.m. to 12.30 p.m.; Wednesdays at 11.30 a.m.; Fridays, 9.30 to 11.30 a.m. during the first and second terms, commencing October 16.

Subjects: Elementary facts of structure of plants and animals; drawing; the use of the microscope; simple experiments on the growth of plants and allied matters; the elements of Agricultural Botany.

Fee, £,2 12s. 6d.

## IV. Botany for Agricultural Students

(Second year of Agricultural Course)

Mondays and Wednesdays, from 2 to 4 p.m., and Fridays, at 2 p.m., during the first and second terms.

Subjects: Structure, nutrition and reproduction of plants; the elements of systematic Botany; fungi which cause diseases of crops.

Laboratory work to accompany the lectures, with special 70rk on identification of grasses and other crop-plants, common weeds, and diseases of plants.

This course will prepare for the National Diploma examination.

Fee, £3 3s.

# V. Forestry

Lectures and laboratory work, Mondays and Wednesdays 9.30 to 11.30 a.m., during the third term.

Occasional excursions will be made during the term; students to pay their on railway fares or other expenses.

Subjects: (1) Forest Botany; the structure and growth of trees and timber.

(2) General Forestry; trees in relation to soil and climate; the growth of trees in the open and in forests; formation and regeneration of woods and plantations; pure and mixed woods; general management of trees.

Laboratory work includes identification of important trees

and timbers, and common diseases of trees.

Fee, £2 12s. 6d.

# VI. Experimental Plant Physiology

Mr. Walker

This class will be held at the Manor Farm, Garforth, on Saturday mornings and afternoons throughout the session. It is intended for teachers of Horticulture, and is held in connection with a two years' course in Horticulture.

Fee for the two courses, £,1 12s. 6d.

## VII. Botanical Laboratory

The Botanical laboratory will be open daily from 9.30 a.m. to 5 p.m. (Saturdays, 9.30 to 12.30).

For fees see page 120.

Each laboratory student, or student taking a practical class in Biology, will be required to use his own microscope and dissecting instruments. Microscopes may be had on loan from the University at the rate of 2s. 6d. each per term, to be paid in advance. The regulations hung up in the Biological laboratory are to be observed by all students in this department.

## **PHYSIOLOGY**

Professor Birch

Mr. Clark

For courses in this Department see page 338.

# **GEOLOGY**

Professor Kendall Dr. Dwerryhouse Mr. Gilligan.

#### I. Intermediate Course

Subjects: General and Stratigraphical Geology, and Geology in relation to the study of Geography.

Lectures Tuesdays, Thursdays, and Saturdays at 10.30 throughout the session.

The course will also include practical work.

Fee for the lectures, f, 3 13s. 6d.

### II. Final Course in Geology

Mondays, Wednesdays, and Fridays throughout the session, at 2 p.m., for students taking Geology as a subsidiary subject, and for students taking Geology as a principal subject in the first year of their final course.

Subjects: The scope of Geology; the crust of the earth; the common rock-forming minerals; classification of rocks according to their mode of origin; aqueous rocks; denudation, transport, and accumulation of rocks; chemical action; forms of stratification; jointing and concretionary structures; igneous rocks; volcanoes and earthquakes; the condition of the interior of the earth; metamorphic rocks and metamorphism; slaty cleavage; mountain-building; the elements of Stratigraphical Geology and Palæontology; the application of Geology to Civil Engineering.

Fee, £3 13s. 6d.

# III. Advanced Geology.

Three lectures a week throughout the session, at times to be arranged, for students taking Geology as a principal subject in the second year of their final course.

# IV, V, VI. Final Courses in Palæontology, Applied Geology, Petrology

These courses will prepare for the Final B.Sc. (Ordinary). Each will consist of two lectures and not less than two hours' practical work a week during the session.

Lecture fee, £2 12s. 6d. for each course.

# VII. Honours Course in Geology

A course of not less than 90 lectures will be given at hours to be arranged with the students.

Fee, £,3 13s. 6d.

### VIII. Honours Course in Mineralogy

A course of 30 lectures and demonstrations will be given for students reading for Honours Geology (Scheme A).

Fee, £1 11s. 6d.

## IX. Mineralogy for Mining Course

A course of 60 lectures with practical work will be given during the session for students taking the Mining course, and will include the following subjects, viz.:

Principles of Crystallography Physical properties of Minerals

Descriptive and Determinative Mineralogy

Modes of occurrence and association of Minerals and Ores, with special reference to Metalliferous Mining.

Lectures on Wednesdays and Fridays, at 11.30 a.m. Lecture fee, £2 12s. 6d.

## X. Agricultural Geology

A course of about 60 lectures will be given on Mondays Wednesdays, and Fridays, during the first and second terms, at 11.30 a.m., commencing October 16. Practical work, Tuesdays, from 2 to 4 p.m.

Subjects: Scope of the science; the composition and physical characters of the common rock-forming minerals; classification of rocks according to (a) their mode of origin and (b) chemical composition; denudation, transport and accumulation; forms of stratification; the subdivision of stratified rocks; economic products of the chief formations; the nature and origin of the drift deposits; their importance in relation to the soils of the North of England; the soils of the Warp lands and the Yorkshire Wolds; the disintegration of rocks, and the formation of soils; geological maps, their interpretation and use; British rainfall, its measurement and variation; storage of subterranean waters; water supply from springs and deep and shallow wells; application of geological knowledge to the selection of sites for roads, bridges, &c.

Fee, £2 12s. 6d.

## XI. Field Course

A course of practical instruction, with field excursions, will be given at times to be arranged.

Fee, £3 13s. 6d. An allowance of £1 1s. will be made to students who attend the excursions towards the payment of railway fares.

XII. Geology applied to Coal Mining

Tuesdays at 4 p.m. during the second and third terms.

Outline of Physical and Dynamical Geology: Denudation, transport, and accumulation of rocks; volcanoes and earthquakes; elevation and depression of the earth's crust; condition of the interior of the earth; carth folds, and the origin of mountain chains.

Historical Geology: General outline of Historical Geology; detailed description of the carboniferous rocks, with special reference to the Yorkshire coalfield; the rocks which overlie the carboniferous; search for coal under the newer rocks; the drift deposits, how they affect the discovery and working of coal.

Fee, £,1 1s.

## XIII. Matriculation Course: Geography

Mondays, Wednesdays, and Fridays, at 9.30 a.m., in the second and third terms.

- (a) Physical Geography: The agents at work on and beneath the surface of the earth; phenomena resulting from earth-heat; distribution of land and water.
- (b) Political and Commercial Geography: Political and economic effects of natural features and conditions; outlines of Geography of the British Empire (including Historical Geography); Political and Commercial Geography of the United Kingdom.

The course will prepare for the Matriculation examination. Fee, £2 128. 6d.

# XIV. Geology applied to Sanitary and Civil Engineering.

Mondays, during the second and third terms at 5 p.m. (see page 361).

Laboratory

The Geological laboratory will be open every day.

Students preparing for the Final B.Sc. (Ordinary), will be required to take not less than four hours practical work a week exclusive of the time devoted to II, III, or IV. Students preparing for Honours will be required to take not less than six hours a week.

For fees, see page 120.

# Courses in Technology

# CIVIL & MECHANICAL ENGINEERING1

Professor Goodman Mr. Gilchrist Mr. MacLachlan Mr Myers Mr DUNCAN Mr. THOMSON

The course of instruction in Engineering extends over three sessions, and comprises (a) Lectures on Engineering Principles and Work: (b) Instruction in Machine and Geometrical Drawing; (c) Experimental Work in the Engineering Laboratory.

The work of the Department is intended to provide a systematic training in the application of scientific principles to engineering purposes, and is not intended in any way to supersede the usual routine of engineering works and offices. An apprenticeship or pupilage in such works is an absolute necessity to every engineering student, and is the only means by which he can obtain a thorough knowledge of the practical details of his future work.

The scientific training at the University must be regarded as a means of acquiring the principles that underlie the art of Engineering, and the training in the works as necessary for acquiring the art itself.

It is very desirable that all students should have some practical experience in engineering works before taking the University course.2

#### Entrance Examination

All students entering the departments of Civil and Mechanical and Electrical Engineering, or entering the degree course or the diploma course in Mining, are required to produce certificates of having passed either the Matriculation examination, the Oxford or Cambridge

<sup>1</sup> For fuller information—including detailed syllabuses of lecture and laboratory courses, special departmental time-tables, description of equipment, and further particulars relating to degrees and diplomas—see the special prospectus of the Engineering departments, to be obtained from the Registrar on application.

2 See a pamphlet published by the University on "The Training of Professional Engineers." The Registrar will forward a copy on application.

examination in Mathematics, London University Matriculation, or other approved examination, or to pass the following Entrance1 examination:

.11 ithmetic: The ordinary rules of Anthmetic including vulgar and decimal fractions, proportion, factors, H. C. F. and L. C. M., practice, square root, conversion from English to metric

system, averages, percentages, interest.

.11gebra: The ordinary rules of Algebra including fractions, brackets, simple equations with problems. H. C. F. and

Geometry: The first book of Euclid or its equivalent including

Trigonometry: Simple problems involving the trigonometrical

Every student is required to pass in each subject.

Students under 17 have to take a paper on English Composition and Dictation.

#### Degree Course

Students who can devote three years to attendance at the University are strongly recommended to take the BSc. degree course in Engineering Science (see p. 215). Students intending to read for a degree are required to pass the Matriculation examination before taking the University course. The Institution of Civil Engineers now requires that all candidates for membership shall take an Honours Engineering degree or shall pass an equivalent examination before being admitted.

Students who have not passed the Matriculation examination are strongly advised to take the Studentship examination of the Institution of Civil Engineers during their second year, and the Associate Membership examination during their third year. Only those students who have done reasonably well in their class examinations will be proposed for admission to the Institution.

If a student fails more than once in his class examinations, in any one course, he will be required to repeat that course of study before proceeding to higher work

<sup>1</sup> The Entrance examination is held in July and October, and it may (under certain conditions) be taken at any place convenient to the candidate. The examination will be held on Tucsday, October 1, 1007, English subjects at 2 p.m.; and Mathematical subjects at 2 p.m.; and Tucsday, July 7, 1008, at 2 p.m. in Mathematical subjects only. Candidates should send in their names to the Registrar beforehand. Students who have attended Evening Classes at the University and have taken a satisfactory position in the examinations, will be exempted from this examination.

Attention is also drawn to the provisions of the Ordinances of the University by which periods of study and examinations passed at other Universities may be accepted by the Senate as exempting undergraduates from a certain amount of attendance and from certain examinations in this University.

Graduates or persons who have passed the Final examinations for degrees of other approved Universities may, under certain conditions, enter the University and become candidates for the degree of M.Sc. without taking the B.Sc. degree after not less than two years of attendance of advanced study or research.

#### LECTURE COURSES

#### I. First Year: Elementary Engineering

Mondays, Wednesdays, and Fridays, at 4 p.m.

This course is suitable for students in all branches of Engineering.

Part 1: Elementary graphical constructions, strength of materials, riveted joints, and beams. Part 11: Fuels, steam boilers, steam and the steam engine, gas and petroleum engines, transmission of power, and hydraulics.

Fee, £4 48.

## II. General Engineering

This course is intended to give students who are going into other branches of industry than that of Engineering an intelligent idea of engines and machinery, &c., without entering into minute details.

Course A: for students of Applied Chemistry, Dyeing Leather Manufacture, and Textile Industries.

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

Materials, fuels, boilers, steam engines, gas and oil engines, hydraulics, prime movers other than heat engines, transmission of power, and various kinds of machines, air, water, and other liquids, grinding machinery, drying plant, fans, electric transmission of power.

Fee, £,3 13s. 6d.

Course B: for Agricultural students.

Mondays, Wednesdays, and Thursdays, at 2 p.m., during the first and second terms only.

Elementary mechanics; air, water, heat; steam engine, gas and petroleum engines; electrical generators motors and conductors.

Fee, £2 12s. 6d.

Course C: for Mining students.

Mondays, first and third terms, at 4 p.m.

Mechanics, strength of materials, heat, boilers, steam engines.

Fee, £,1 1s.

Laboratory Class: On Mondays, throughout the session, from 5.30 to 7 p.m., instruction will be given in the Engineering laboratory in: Mensuration, levers, graphic determination of forces, testing, indicating, steam and boiler testing.

Fee, £1 11s. 6d.

#### III. Second Year: Civil Engineering

Tuesdays and Thursdays, at 4 p.m., and Saturdays at 11.30 a.m.

Part I: Chain surveying, needle surveys, plane table, angular instruments, and levelling. Part II: Geodetic astronomy, optical instruments for the measurement of distances, setting out of railway curves, half width of railways, hydrographic, geodetic, and underground surveying. Part III: Girders, bridges, and roofs of steel and timber.

Fee, £,3 13s. 6d.

#### IV. Third Year: Civil Engineering

Tuesdays and Thursdays, at 9.30 a.m., and Saturdays at 10.30 a.m.

Part I: Materials of Civil Engineering other than metals, including timber, limes and cements, stone, bricks and pipes; foundations; theory of masonry structures. Part II: Roads, streets and railways. Part III: Water Supply and Sanitary Engineering.

Fee, £3 13s. 6d.; for parts i and iii only, £2 12s. 6d.; for part ii only, £1 11s. 6d.

#### V. Practical Surveying

Instruction is given in Surveying and field work during the Easter vacation from March 23 to April 8, 1908. The class is held at Barden in Wharfedale, where accommodation is provided at a farmhouse.

Fee—Including board and lodging... .. £6 6 o

"—Including the Civil Engineering Lec-

tures in Class III or IV ... 9 9 c

#### VI. Second Year: Mechanical Engineering

Mondays, Wednesdays, and Fridays, at 10.30 a.m., with an exercise class one hour a week.

Graphical constructions, strength of materials, steam boilers, steam and the steam engine, air, gas and petroleum engines, transmission of power, hydraulics, mechanics of machines.

Fee, £4 4s.

#### VII. Third Year: Mechanical Engineering

Course A: for civil and mechanical engineers.

Tuesdays and Thursdays, at 10.30 a.m., during the first and second terms, with an exercise class on Saturdays, at 9.30 a.m.

Hydraulics and compressed air.

Fee, £2 125. 6d.

Course B: For electrical and mechanical engineers.

Saturdays at 10.30 a.m, with an exercise class on Saturdays at 9.30 a.m.

Steam engines, dynamics of the steam engine, transmission of power, friction and lubrication.

Fee, £2 28.

Course C: For mechanical engineers.

Tuesdays and Thursdays, at 10.30 a m, during the third, term, with an exercise class on Saturdays at 9.30 a m.

Strength of materials, kinematics of machines, refrigerating. Fee,  $\mathcal{L}_{1}$  1 is.

Fee for courses A, B and C,  $\mathcal{L}_{4}$  4s.

#### VIII. Engineering Drawing

The Drawing department is open every day. A draughtsman is always in attendance.

#### Fies for the Session:

Students	attending	T 2	hours	or more	e per week	£7	7	0
,,	"	6	hours	per wee	k	 5	5	0
,,	27	3	,,	,.		 3	3	0

#### VIIIa. . Machine Drawing and Design

Saturdays, at 9 30 a.m.

Fee, £1 118. 6d.

#### VIIIb. Graphics

Thursdays at 11.30 a.m.

No fee will be charged to students taking the full drawing course.

#### IX. Engineering Laboratory

The work done in this department consists chiefly of making experiments and testing operations; it in no way whatever pretends to supersede the practical training that every engineer must undergo in engineering works. It should be clearly understood that no instruction is given in the use of either hand or machine tools; such work can only be properly done in engineering works.

For fees see page 120.

The experimental work consists of systematic instruction in the strength and properties of the chief materials used in engineering construction. The work, as far as possible, is done on a large and practical scale. For particulars of the equipment of the laboratory, see the prospectus of the Engineering departments.

#### Evening Course

See under Evening Classes, page 354.

## ELECTRICAL ENGINEERING

Mr. Parr

Mr. FRENCH

The courses of study in this department have been arranged to meet the requirements of different classes of students as follows:

- 1. A course for the degree of B.Sc.
- 2. A course for the diploma in Electrical Engineering.

<sup>1</sup> For fuller information—including detailed syllabuses of lecture and laboratory courses, special departn that time-tables, description of equipment, and further particulars relating to degrees and diplomas—see the special prospectus of the Engineering departments, to be obtained from the Registrar on application.

Students who are unable to devote the time required for the complete courses for the degree or diploma may attend parts of those courses.

The conditions respecting Entrance examination are the same as those prescribed in Civil and Mechanical Engineering. (See page 257).

The Degree course necessitates three years' attendance at the University after matriculation in the University.

The Diploma course extends over three years after the Entrance examination, but may, under certain conditions, and where the student possesses an intimate knowledge of all the work of the first year, be taken in two years.

The instruction during the first year of the above courses is the same for Civil, Mechanical, and Electrical Engineering. In the second year the electrical engineering student begins to specialise in the work of the department, while in the third year most of his time is devoted to this particular work.

Attention is also drawn to the provisions of the Ordmances of the University by which periods of study and examinations passed at other Universities may be accepted by the Senate as exempting undergraduates from a certain amount of attendance and from certain examinations in this University.

Graduates or persons who have passed the Final examinations for degrees of other approved Universities may, under certain conditions, enter the University and become candidates for the degree of M.Sc. without taking the B.Sc. degree after not less than two years of attendance of advanced study or research.

#### LECTURE COURSES

## I. Elementary Electrical Engineering

Mondays and Fridays at 2 p.m., and Thursdays at 4 p.m. throughout the session.

This course is specially intended for students in their second year, who are preparing for the University degree or the diploma in Electrical Engineering, and embraces the application of fundamental principles in the construction and action of electrical engineering appliances in general.

Fee, £4 4s.

#### II. Advanced Electrical Engineering

Mondays, at 4 p.m., throughout the session.

This course is specially intended for students in the third year of preparation for the degree or diploma, and embraces the generation, transformation, distribution, and applications of single and polyphase alternating currents of electricity.

Fee, £1 11s. 6d.

#### III. Advanced Electrical Engineering

Tuesdays, at 4 p.m., throughout the session.

This course is specially intended for students in the third year of preparation for the degree or diploma, and embraces the generation, transformation, distribution, and applications of continuous currents of electricity.

Fee, £,1 11s. 6d.

#### IV. Electrical Design

Lectures on Fridays at 4 p.m., and Designing and Drawing on Mondays, 11.30 a.m. to 12.30 p.m., and 2 to 4 p.m., Thursdays 9.30 a.m. to 12.30 p.m., throughout the session.

This course also is specially arranged for students in the third year of preparation for the degree or diploma, and embraces lectures on the general principles underlying electrical design, and also the complete mechanical and electrical design of direct and alternating current dynamos, motors, transformers, condensers, together with installation design and estimates. Students will themselves design and draw from new data the machines and appliances dealt with in the course.

Fee, £3 13s. 6d.

## **Evening Course**

See under Evening Classes, page 355.

#### ELECTRICAL ENGINEERING LABORATORIES

These comprise—elementary laboratories, dynamo, electromotor, transformer, instrument, photometer, and cable jointing rooms, which are equipped with a large variety of the most modern plant and appliances necessary for elementary and advanced testing in electrical engineering.

#### MINING 1

## Assisted by the Drapers' Company of the City of London, and by the West Yorkshire Coal Owners' Association

Professor Thompson

#### Mr. Perkin

The courses of study in this department have been arranged to meet the requirements of different classes of students, as follows:

- 1. Three years' course in General Mining, preparing for the degree of B.Sc.
- 2. Two years' course in Coal Mining, preparing for the diploma in Coal Mining.

For degree and diploma students the conditions respecting Entrance examinations are the same as those prescribed in Civil and Mechanical Engineering. (See page 257).

## I. Degree Course in General Mining<sup>2</sup> (Three Years)

This course of instruction is intended for students who desire to qualify themselves as mining engineers, surveyors, or assayers, and also for those who intend, in the future, to take charge of mining and prospecting operations in the colonies or foreign countries. During the first year the student applies himself entirely to general science and Engineering. In the second year he continues his work in general science and Engineering, adding Electrical Engineering and the introductory lectures on Coal Mining. In the third year the student takes a course of Geology, including field work, but spends the greater part of his time in special mining work. Students are required to devote the summer vacation to getting experience in mines.

In addition to the subjects specified in the time tables below, students are advised to study a modern language.<sup>3</sup>

<sup>2</sup> Graduation as B Sc. on this course has been recognized by the Secretary of State for the Home Department as equivalent to two years' service in the mine for the purposes of the Colliery Manager's certificate.

3 See first two paragraphs on page 250.

<sup>1</sup> For fuller information - including detailed syllabuses of lecture and laboratory courses, special departmental time-tables, description of equipment, and further particulars relating to degrees and diplomas—see the special prospectus of the Mining, Fuel, and Metallurgical departments, to be obtained from the Registrar on application.

Students who are unable to afford time for the complete course may be admitted to the Mining, Surveying, and Assaying courses on furnishing proof that they possess sufficient knowledge to follow the instruction given.

Fees, first year, £33 1s. 6d.; second year, £30 3s.; third year, £32 7s.

## Syllabus

First Year			ı	Second Year		
,		uns week			H	ours week
Mathematics, Intermediate	•	3		Mathematics, Final		3
Physics II		3	1	Electrical Engineering		3
Chemistry, General Course .		3		Engineering VI		
Engineering I		3	į	Coal Mining		I
Physical Laboratory				Engineering Laboratory		6
Chemical Laboratory		6	1	Electrical Engineering		
Engineering Drawing and			1	Laboratory		3
Laboratory .		Ġ.	•	Engineering Drawing		6

Third Vear	1 1	lours rweek
Mining		3
Metallurgy, 1st term	)	Ū
Ore Dressing, 2nd term	1	2
Surveying, 3rd term .	1	
Geology I		;
Geology Laboratory .		6
,, Field Course		
Metallurgy Laboratory, 1st term	)	
Metallurgy Laboratory, 1st term Mining Laboratory and Surveying, 2nd and	Ļ	15
3rd terms		,

## II. Diploma Course in Coal Mining (Two Years)

This course is arranged for those who intend to devote their attention to coal mining at home, and who, at the same time, desire to get a liberal training in the scientific principles underlying their profession.

Students entering this course apply themselves during the first year chiefly to general science and Engineering. In the second year the work in Electrical Engineering is continued; Geology is added, but students devote themselves mainly to the special mining work, taking the

r Possession of this diploma has been recognized by the Secretary of State for the Home Department as equival int to two years' service in the mine for the purposes of the Colliery Manager's certificate

lectures on Mining and those on Metallurgy (first term only), which deal with fuel, refractory materials, and the properties of metals and alloys. In the laboratory students receive instruction in the testing of fuel, safety lamps, fans, &c., and conduct experiments on coal washing. The remainder of their time is spent in making drawings of machinery used in mines, plan drawing, and in the course of field and underground work in surveying.

Students are required to obtain four months' experience at a mine during the vacations or to have had previous experience at mines before entering on the course.

Fees, first year, £34 os. 6d.; second year, £27 3s. 6d.

#### Syllabus

First Year
Physics I.
Chemistry I. (two terms)
Mathematics II.
Engineering I.
Coal Mining
Chemical Laboratory, three hours
Physical Laboratory, two hours
Engineering Laboratory, six hours
Drawing, five hours
Electrical Engineering Laboratory,
two hours

Second Year

Mining
Metallurgy (first term)
Geology I.
Geological Laboratory, three
hours
Electrical Engineering Laboratory,
three hours
Mining Laboratory and Surveying,

fifteen hours

#### LECTURE COURSES

## I. Coal Mining

Mondays, at 2 p.m.

These lectures are intended to co-ordinate the information which students have acquired during the previous vacation, and to show them what to observe in the next summer's work preparatory to the Mining lectures of the third year.

With this object the general processes necessary for the extraction of coal from the ground will be passed in review, while to relieve the lectures of the third year those mining operations which find their best exemplification in coal mining will be discussed in detail.

Fee, £1 118.6d.

#### II. Mining

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

This course will consist of about 90 lectures, which will be delivered during the third year. The object of these lectures will be to explain to students the methods, operations, and appliances commonly employed in mining, with illustrations from actual practice in various districts and countries, and to indicate the principles which should influence the selection of methods and the introduction of such variations in them as local circumstances may demand.

Fee, £3 13s. 6d.

#### III. Dressing of Minerals

Two lectures a week during the second term at times to be arranged. The principal methods and machines adopted for the preparation of coal and ores for the market will be described.

Fee, £,1 is.

#### IV. Laboratory Work

A course of instruction in testing fuel and refractory material and the assaying of ores and metallurgical products. Special attention will be given to the methods suitable for prospectors and to experimental work in the concentration of minerals by water.

#### V. Surveying (Office Work)

During the second term students in the regular course spend their time in plotting surveys, drawing mining machinery, and in general office work in studying the methods of recording field observations, the purposes to which these are applied, and the instruments with which they are made.

#### VI. Surveying (Field and Underground Work)

During the third term a course of instruction in field work will be given, the students making and plotting their own surveys.

#### VII. Mine Surveying

Two lectures a week during the third term at times to be arranged. Supplementary to the course of Field and Underground work.

Fee, £,1 1s.

The fees for laboratory work and surveying will be according to the time spent by the student in such work. (See page 120).

#### **Evening Course**

See under Evening Classes, page 356.

#### FUEL AND METALLURGY

#### Professor Bone

The courses of study in this Department have been drawn up to meet the requirements of students who are preparing for responsible positions, either as gas engineers, or in fuel and metallurgical industries.

The courses in Gas Engineering and the Technology of Fuel will chiefly deal with the manufacture of coal gas and gas lighting, by-product coking processes, and the production and applications of gaseous fuels for heating and power purposes.

The Metallurgical courses, besides dealing with general processes for the concentration and extraction of ores, will be chiefly directed to problems underlying blast furnace and open hearth steel practice, and to the microstructure, physical properties, and heat treatment of steel and other industrial alloys.

Whilst special attention will be given to research work in the above subjects, both in the laboratory and on industrial plants, ample provision will also be made for systematic work in the chemistry of gases, photometry, pyrometry, calorimetry, metallography, etc., and for the analysis and testing of coals, gases, ores, slags, alloys, and other metal lurgical products.

# I. Ordinary B.Sc. Degree Course in (i) Gas Engineering or (ii) Fuel and Metallurgy.

All students will take the same Intermediate course, and also the same Second Year's course. The course will be differentiated in the third year, according to the respective needs of gas engineers and metallurgists.

#### Synopsis

Eirst Vear			Second Year		
	Hours burweek				week
Mathematics, Intermediate	3		Chemistry Lectures		3
Physics Lectures II .	3		Engineering Lectures		3
Chemistry, General Course	. 3	(	Chemistry of Gases, Lectur	6~	1
Applied Mechanics	3	1	Physical Laboratory		3
Physical Laboratory .	3	(	'hemical Laboratory		6
Chemical Laboratory	1.2	1	Fuel and Metallurgical		
Engineering Drawing and			Laboratory		0
Laboratory .	3	1	Mechanical Drawing ar	ıd	
•	V		Engineering Laboratory		Ò

#### Third Year

Lecture Courses	Hours per week
Technology of Fuel	1
Coal Gas Manufacture (2nd term)	2
By-Product Coking, 6 lectures during 2nd term.	
Gas Lighting and Heating (3rd term)	1

#### (ii) FUEL AND METALITRGY

#### Lecture Comses

Technology of Fuel	I
By-Product Coking, 6 lectures during 2nd term.	
Metallurgy of either (a) Iron and Steel er	
(b) Copper, Lead, Zinc, and Tin	I
Alloys (during 3rd term)	.2

#### Practical Work

Mechanical Drawing ... 6 hours per week. Fuel and Metallurgical Laboratory

22 to 24 hours per week.

<sup>1</sup> The Third Year's courses are so arranged that they may be taken as subjects of post-graduate study by duly qualified graduates of this or other approved University; any section, or sections, of the recourses may also be taken, during one or two terms, by outside students, provided that they possess an adequate knowledge of Mathematics, Physics, and Chemistry.

## II. Honours B.Sc. Degree

Honours in Gas Engineering or Fuel and Metallurgy will be awarded to candidates who, having obtained the Ordinary degree, with either Gas Engineering or Fuel and Metallurgy as a principal subject, and being recommended as suitable to proceed with an Honours course, shall have spent one year in research, or in the preparation of a thesis on some industrial process, to the satisfaction of the examiners, attendance at the University during this fourth year not being compulsory.

# III. Diplomas and Degree Courses for Post-Graduate Students

- (a) A diploma in either (i) Gas Engineering or (ii) Fuel and Metallurgy will be awarded to graduates of this or some approved University who, having graduated in Science with Chemistry or Engineering as a principal subject, shall have attended for one year the prescribed course for the third year of the Ordinary degree course, and have passed an examination thereon.
- (b) The degree of B Sc. with Honours may, in Gas Engineering or Fuel and Metallurgy, be conferred upon students who, having obtained the diploma under the provisions of the preceding section, shall have spent an additional year in research in the Department, to the satisfaction of the examiners.

## IV. Two Years Courses for Non-Graduates

These courses are intended for students who, while not proposing to proceed to a degree, desire to take systematic instruction in either (i) Gas Engineering or (ii) Fuel and Metallurgy.

Students entering for these courses must produce certificates of having passed either the Matriculation examination, the Oxford or Cambridge Local examination in Mathematics, London University Matriculation, or other approved examination, or they will be required to pass the special entrance examination prescribed for Engineering students on page 257.

The First Year's course will be the same for all students, but the Second Year's course may be differentiated according to individual requirements.<sup>1</sup>

	Fir	st Yea	ır		
Mathematics Physics Chemistry	Intermed	liate I.	ecture	٠.	
Chemical Lal					12 hours
Physical Labo Applied Med	chanics or	· Gene	eral P	ingine	3 hours ering
Lectures pa and Engine	<i>lus</i> 3 hour eering Labo	rs Med Fratory	chanica •	1 Dra	wing

Secon	nd Year
(i) Gas Engineering	(ii) FUEL AND METALLURGY
Lectures Hours	Lectures Hours
Chemistry	Chemistry 3 Technology of Fuel 1 By-Product Coking, 6 lectures
Gas Lighting and Heating (3rd term) 1	

#### Practical Work

Chemical Laboratory . . . . 6 hours. Fuel and Metallurgical Laboratory . . . 12 hours.

#### LECTURES AND LABORATORY WORK

#### I. The Physical and Chemical Properties of Gases

Tuesdays at 11.30 a.m. throughout the session.

(a) Kinetic theory; fundamental gas laws; Van der Waal's equation; compressibility and liquifaction of gases; the critical state; specific heats; dissociation; diffusion and transpiration; viscosity of gases; flow of gases through pipes; modern theories as to the nature and conditions of chemical changes in gaseous systems; velocity of re-action chemical equilibrium; influence of moisture and surface in gas re-actions; occlusion of gases by metals and the action of gases upon solids generally; principles of thermo chemistry; gas calorimeters; heats of combustion of gases.

<sup>1</sup> Students who have passed "atisfactorily through this Two Years' course may be permitted to enter for the Diploma examination.

- (b) The mechanism of combustion, &c. : slow combustion; ignition points of gaseous mixtures; flames and explosions; the explosion wave; rates of explosion; the combustion of carbon, carbon monoxide, and cyanogen; the combustion of hydrogen and of hydrocarbons; the action of steam upon incandescent carbon; the reversible system  $CO + OH_2 = CO_2 + H_2$ ; the action of CO upon metallic oxides; the thermal decomposition of hydrocarbons.
- (c) Gas analysis and manipulation: preparation of pure gases; use of liquid air for purification purposes; fractionation of gas mixtures; collection and storage of gas samples; solubilities of gases in liquids; principles of gas analysis.

Fee £1 115. 6d.

#### II. The Technology of Fuel

Tuesdays at 9.30 a.m. during the first two terms.

Introductory: the mechanical theory of heat; specific and latent heats; calorimetry; heats of combustion of fuels; pyrometry.

Coal and its combustion, natural gas; petroleum; shale oil and oil fuels generally; the manufacture of coke in byproduct ovens; producer gas and its applications, including water gas.

Fee £1 1s.

## III. By-Product Coking Processes 1

## IV. The Manufacture and Distribution of Coal Gas 1

#### V. Gas Lighting and Heating

Tuesdays at 9.30 a.m. during the third term.

The nature and structure of hydrocarbon flames; theories of luminosity: types of gas burners; the bunsen burner; gas stoves; theory of the incandescent mantle; acetylene as an illuminant; photometry and spectrometry.

ifee ros. 6d.

## VI. Metallurgical Courses

Fridays at 11.30 a.m. and 4 p.m. throughout the session. General introduction; metallic ores: their classification occurrence, and valuation; refractory material used in furnace construction; fuels and flames; general design of furnaces, &c.

<sup>1</sup> It is expected that arrangements will be made for the delivery of Special Courses of Lectures during the second term by outside Lecturers connected with the respective industries.

(a) Iron and Steel: The economic conditions of the iron and steel industries; factors regulating costs of production; positions of British, Continental, and American industries compared; preparation of ores for the blast furnace; blast furnace practice; properties of cast iron; foundry practice; refining and puddling of cast iron; manufacture of steel by the Bessemer and open hearth processes, including the most recent developments in open hearth practice; rolling and forging of steel; cementation and crucible processes.

(b) Copper, Lead, Zinc, and Tin: The course will deal generally with the various processes for the extraction and refining of these metals, including the desilverising of lead

and copper, slag smelting, &c.

(c) Microstructure of Metals, Allors, &c.: Microstructure, heat treatment, and constitution of the above metals and their principal alloys, including steels, bronzes, and brasses; the theories of hardening and tempering of steels will be fully considered.

Fee £.2 128. 6d.

#### VII. Laboratory

The newly erected Fuel and Metallurgical laboratories will be open during the session from 9 30 a.m. to 1 p.m. and from 2 to 5 p.m., except on Saturday afternoons. The equipment will provide for instruction and research in the following subjects:

- (a) Gas analysis, photometry and spectrometry, gas calorimetry, gaseous combustion and explosions, the chemistry of gas production, testing of gas coals, and experiments with gases under high pressures including the compression and liquefaction of gases.
- (b) The analysis and testing of coals.

(c) The analysis of ores, slags, mattes, alloys, and other metallurgical products.

(d) Microstructure, heat treatment, and mechanical testing of steels and other industrial alloys, including the rolling and annealing of the same.

Special courses for outside students in any of the above subjects can be provided by arrangement with the Professor, and every facility will be afforded to properly qualified persons who may with to undertake research work in connection with industrial processes.

Arrangements will be made enabling regular students of the Department to carry out efficiency trials of gas producer plants, etc., and help will be given to those who desire to gain practical experience in works during the summer months.

For fees see page 120.

#### TEXTILE INDUSTRIES

#### Endowed by the Clothworkers' Company of the City of London

#### Professor Beaumont

Mr. Hollis Mr. Yewdall Mr. Law Miss Benton Mr. Farley Mr. Holloway Mr. Fox

The Department comprises the following branches:

- (a) Woollen Yarn Manufacture.
- (b) Worsted Yarn Manufacture.
- (c) Designing, Weaving, and Textile Manufacturing.
- (d) Finishing of Textile Fabrics

Each branch possesses a complete plant of machinery designed and constructed for the demonstration of the technicalities of the various processes.

All the experiments made on the scouring, blending, carding, combing, spinning, weaving, dyeing, and finishing machines are primarily conducted for showing the nature and results of certain methods of work. The student records the experiments made during the session, and receives actual specimens of materials, yarns, and fabrics.

The scheme of teaching, as it relates to mechanical operations, is devised to give as varied an experience in spinning and textile manufacturing as possible, and also to supplement practically, in an efficient way, the lecture courses of study.

The Spinning Buildings are equipped with machinery for treating fine, medium, and coarse wools from the raw or greasy state to the spun yarn, whether on the worsted or woollen system, and for the construction of single, folded and fancy twist threads.

<sup>1</sup> For further details and time-tables of all courses of study see the prospectus of the department of Textile Industries, obtainable from the Registrar on application.

In the Weaving Sheds there are 116 looms, including the principal types of power looms, with the necessary accessories, such as winding, warping and beaming (hand and power), card stamping and lacing machines, healding, pegging, and other frames. This extensive series of looms affords unique facilities for experiments in the design, structure, weaving, and colouring of all classes of fabries.

The Finishing Shed contains machinery for scouring, milling (by stocks, machine, and combined milling machine and stocks), raising, cutting (on three builds of machines),

and pressing (electric system).

In the Textile Museum there is a valuable collection of woven and other specimens, which students have the

privilege of examining during the session.

The testing and examination of fibres, materials in the several stages of manufacture, yarns and fabrics, are so important in teaching and actual manufacturing that a conditioning laboratory has been equipped with apparatus for this purpose.

## Courses of Study

The following are the principal courses of study:

(a) Textile Designing and Cloth Emishing

(b) Woollen and Worsted Spinning

(c) Textile Manufacture, including Woollen and Worsted Spinning, Textile Designing and Weaving and Cloth Finishing.

## Courses for the Diploma

Diplomas are awarded in each of the above courses when the following subjects are also taken:

(a) Lectures in Engineering, French or German; Practice in Applied Art, and Mechanical Drawing.

(b) Lectures in First Year Textile Designing and Weaving, Engineering, French or German, and Mechanical Drawing.

(c) Lectures in Engineering, French or German

and Mechanical Drawing.

For general regulations applicable to students taking the courses of study and examinations for the diploma, see page 166.

## Lecture Courses and Experimental Work

#### I. Designing and Weaving

First year: Lectures, pattern analysis, designing and calculations, Tuesdays and Thursdays, from 9 to 11.30 a.m., throughout the session. Subjects: Designs and fabrics, hand looms, power looms, yarns, calculations, pattern dissection.

Fee, £, 5 5s.

Experimental Weaving. For fees see page 120.

Second year: Lectures, designing, pattern analysis, and calculations, on Mondays, from 9.30 to 11.30 a.m., and Fridays, from 10.30 a.m. to 12.30 p.m. throughout the session. Subjects: Fabrics and designing, power looms, Jacquard or Harness loom, calculations, pattern analysis. Fee, £5 5s.

Experimental Weaving. For fees see page 120.

Third year: Daily, except Saturdays, from 9.30 a m, to 12.30 p.m., and from 2 to 5 p.m. This class is intended for students who desire to study any particular branch of textile manufacture.

Experimental Weaving. For fees see page 120.

## II. Textile Colouring

First year: Lectures, Tuesdays and Thursdays, from 11.30 a.m. to 12.30 p.m., during the first and second terms. Subjects: Theories of colouring; qualities of colours; functions of colours in woven design: harmony and contrast; various styles of patterns produced by colours, such as mixtures, stripes, checks, &c. Fee, £2 2s.

Second year: Mondays, from 11.30 a.m. to 12.30 p.m., during the first and second terms. Subjects: Colour in relation to combination and drafted designs; backed and double-make cloths; rib patterns; spotted effects; figured patterns coloured in the warp, in the west, and in both warp and west. Fee, £1 18.

## III. Finishing of Woven Fabrics

Lectures on styles and processes of finishing, and the construction of finishing machinery, on Fridays, from 9.30 to 10.30 a.m. Subjects: Scouring, tentering, milling, washing

chemistry of the colouring matters and their manufacture, with the object of becoming dyers' chemists, calico-printers' chemists, chemists in colour works, travelling chemists for dye manufacturers, experts in analysis of dyewares, &c. For the latter class, i.e., colour chemists, an intimate acquaintance with the structural organic chemistry of the artificial dyestuffs is essential, and a very thorough knowledge of pure chemistry is required before specialising in this direction. For the dyer such an advanced knowledge, though useful, is not essential, and in any case cannot be acquired in a three years' course. is, however, equally necessary for the dyer that he should acquire at the outset a sound fundamental knowledge of the chemical and physical sciences underlying the art with which he is ultimately to deal, whilst the study of the colouring matters may be confined to a general acquaintance with their chemical relationships and a knowledge of their properties and dyeing behaviour.

To meet the requirements of these two classes of students, two courses have been arranged, namely:

- 1. A three years' course for practical dyers, qualifying for the University diploma in Dyeing. (See page 281).
- 2. A four years' course for colour chemists, qualifying, if taken after Matriculation, for the degree of B.Se, Ordinary and Honours. (See page 213).

A third course has been arranged for those who wish to specialise as Textile Chemists or to acquire a special knowledge of chemistry as applied to the textile arts other than dyeing. (See page 282).

Students holding a degree of any University (English or foreign) or otherwise bringing forward satisfactory evidence of a sufficient previous training in pure chemistry and general science will be admitted at once to any of the lecture courses or to laboratory work in the department.

Attention is also drawn to the provisions of the Ordinances of the University by which periods of study and examinations passed at other Universities may be accepted by the Senate as exempting undergraduates from a certain amount of attendance and from certain examinations in this University.

Graduates or persons who have passed the Final examinations for degrees of other approved Universities may, under certain conditions, enter the University and become candidates for the degree of M.Sc. without taking the B.Sc. degree after not less than two years of attendance of advanced study or research.

Students of the Textile Department who wish to combine with their textile work a short course in dyeing will not be required to study pure chemistry.

The lectures on the chemistry of the artificial and natural colouring-matters will be open to senior students in the department of pure chemistry without joining the regular four years' course.

# I. Diploma Course for Practical Dyers and Dyers' Chemists

(Three Years)

This course is recommended to students who wish to obtain a good scientific and practical education in the art of Dyeing.

In awarding the Diploma the senate will take into account the results obtained in all the term examinations throughout the entire course in addition to any final examination which may be imposed. Students not reaching a satisfactory standard in all the subjects taken will be disqualified. (See page 166). Students already holding a University degree or otherwise bringing forward satisfactory evidence of previous scientific training, may upon application, be admitted to the Diploma upon a shortened period of study.

First Year H		Second Year	Hou per w	
	i week		ber w	cek
Chemistry, General Course	4	Organic Chemistry		3
Physics, Intermediate	3	General Engineering (II	A) .	3
German (optional)		German (optional)		
Chemical Laboratory	22	Chemical Laboratory	1	Ĭ
•	1	Experimental Dyehouse	1	5
	Third	per w		
Dyeing Lectures		atile Fibres (1st term)   2 (2nd term)   2		
Experimental Dyehor	180. Pr	actical Dyehouse, and		
		32	, .	

Fees (including Entrance and University Union fees, but exclusive of German), first year, £24 19s.; second year, £27 12s. 6d.; third year, £22 7s 6d.

## II. Degree Course for Colour Chemists (Four Years)

This course is recommended to students who desire to become chemists in colour works, dyers' chemists, travelling chemists for dye manufacturers, experts in analysis of dyewares, &c.

If taken after Matriculation this course qualifies for an Ordinary or Honours B.Sc degree. Unmatriculated students are eligible for the Diploma under the conditions mentioned above.

First Year Hoats per week Chemistry, General Course : 4 Physics, Intermediate :: 6 Mathematics :: 3 German (optional) : :: :: Chemical Laboratory :: 18	Second Year Hours per week  Chemistry, Organic (IV) and Inorganic (III) 6 General Engineering IIA 3 German (optional) . Chemical Laboratory . 22
Third Year Hours per week	Feurth Year Hours
Chemical Technology of Textile Fibres (1st term) Dyeing Lectures (2nd term) German (optional) Experimental Dyehouse and Clothworkers' Laboratory Chemistry Lectures (V C) 31	Artificial Colouring Matters (1st and 2nd terms)  Natural Colouring Matters (3rd term)  Clothworkers' Laboratory, Calico Printing and Practical Dychouse

Fees (including Entrance and University Union fees, but exclusive of German), first year, £28 15s. 6d.; second year, £26 14s. 6d.; third year, £23 14s.; fourth year, £22 5s. 6d.

## III. Course for Textile Chemists

This course is intended to meet the requirements of textile students or others desiring to specialise as textile chemists or to acquire a special knowledge of the chemistry of the textile fibres, the chemical and physical principles underlying many processes of textile manufacture, the chemical analysis of the various materials employed, and the chemical investigation of textile problems.

Dyeing 283

The course, which may extend over one or two sessions, will consist of lectures on the Chemical Technology of the Textile Fibres (Lectures I), two hours per week during first term, lectures on the Chemistry of Textile Manufacture and Materials (Lectures V), two hours per week during second term, and two days per week laboratory work for three terms. The latter will comprise instruction in the methods of analysis and conditioning of wool. silk, cotton, flax, jute, artificial silk, etc.; the testing of oils used in carding, combing, spinning and weaving; soap analysis and the determination of the detergent power of various soaps; the examination of sizing and finishing materials, and analysis of cotton finishes: determination of the degree of weighting of silk; water analysis: chemical methods of examining faults in textile fabrics; and allied subjects.

The course can be combined with work in the Textile Industries Department. Before entering upon it students are required to produce evidence of a competent knowledge of general chemistry, or to have studied chemistry in the University for a period extending over two sessions.

#### LECTURE COURSES.

## I. Chemical Technology of Textile Fibres

Tuesdays and Thursdays at 9.30 a.m. during the first term.

The chemical and physical properties of the various animal and vegetable fibres, viz., cotton, flax, hemp, ramie, jute, wool, hair, silk, and artificial silk. The processes and machinery employed in the isolation, purification, bleaching, and finishing of the different fibres and of the textile materials prepared from them.

Fee, £1 1s.

## II. Chemistry and Technology of Dyeing

Tuesdays and Thursdays, at 9.30 a.m. during the second term.

Mordants; classification of colouring matters; methods of application in dyeing and printing of the various

classes of colouring matters; theory of dyeing; testing of colours for fastness; machinery for dyeing; printing of cotton, wool, and silk.

Fee, £1 1s.

#### III. Chemistry of the Artificial Colouring Matters

Tuesdays and Thursdays at 4 p.m., during the first and second terms.

Distillation of coal-tar and separation of benzene, toluene, naphthalene, anthracene, &c.; preparation of intermediate products of colour manufacture; the manufacture, properties, and constitution of the most important colouring matters belonging to the following groups:—Rosaniline, pyrone, azine, oxyazine, thiazine, acridine, quinoline, thiobenzenyl, nitro, azo, stilbene, anthracene, sulphide colours, and indigo; general methods and plant employed in the preparation of colouring matters and their raw materials.

Fee, £,2 2s.

## IV. Chemistry of Natural Colouring Matters

Tuesdays and Thursdays at 4 p.m., during the third term. The origin, chemistry, and technology of the principal natural dye stuffs: Madder, logwood, brazilwood, cochineal, barwood, safflower, cudbear, orchil, weld, turmeric, quercitron bark, Persian berries, fustic, catechu, indigo.

Fee, £1 1s.

## V. Chemistry of Textile Manufacture and Materials.

Wednesdays and Saturdays, at 9.30 a.m., during the second term.

The chemical composition and manufacture of soaps; theory of the detergent action of soap; choice of soaps for wool scouring: removal of lime from wool. The oils and fats employed in spinning and weaving; their properties, suitability for particular purposes and analysis. The chemistry of the carbonising process. Materials employed in sizing and finishing. Softening, filling, weighting and antiseptic agents. Waterproofing and fire resisting materials. Methods of investigating faults in textile fabrics.

Fee  $\mathcal{L}_{1-15}$ .

#### LABORATORY WORK.

- (1.) The Experimental dyehouse will be open for work every weekday during the session from 9 a.m. to 5 p.m., Saturdays 9 a.m. to 1 p.m. The dyehouse is fitted up with modern dyebaths suitable for comparative dyeing trials, drying stoves, and other appliances.
- (2.) The Practical dychouses are equipped with the most modern machinery for carrying out experiments on a practical scale. The equipment includes many model machines, all of which are driven by electric motors. In these dychouses advanced students of dyeing receive training in the treatment of all classes of textile materials.
- (3.) The Printing laboratory is equipped with a model printing machine, steaming chamber, colour pans, &c. A practical course in calico printing is held during the third term.
- (4.) The Clothworkers' laboratory is a spacious building provided with every facility for the conduct of chemical work upon colouring matters. The work carried out comprises: (a) Analysis of colouring matters; (b) preparation of coal tar products and colouring matters; (c) researches upon artificial and natural colouring matters, directed to the determination of their constitution, discovery of new groups, the solution of technical problems, &c.

To cover cost of materials and loan of special or large apparatus a charge of £5 per session will be made to all research workers or students working full time in this laboratory, and of £1 per term to part-time students. All ordinary apparatus, however, must be provided by the student.

## Special Courses of Study

Experimental classes will also be held in the following specialised subjects if a sufficient number of students present themselves:

- 1. Paper staining.
- 2. Straw dyeing.
- 3. Lake and pigment manufacture.

#### RESEARCH WORK.

Special facilities are provided in the Clothworkers Research laboratory for the conduct of research work in colour and textile chemistry. The laboratory is a very spacious one and is thoroughly equipped for carrying out scientific and technical investigations in these subjects. Post graduate students are admitted to research work under the direction of the Professor, and will find an extra year thus spent greatly to their future advantage. Graduates of other Universities (English or foreign), and other fully qualified chemists, may also obtain admission as research workers for any period desired.

For conditions of admission to research work at special fee, see page 121.

For Research Scholarships see page 371.

#### **Evening Course**

See under Evening Classes, page 359.

#### Museum

The museum of natural and artificial dyestuffs and textile fibres is open to students daily.

## Examinations of the City and Guilds of London Technical Institute

The above courses prepare for the technological examinations of the City and Guilds of London Institute in Dyeing and also in Coal Tar Products. Students of the Department are recommended to present themselves for these examinations in the last year of their University course. (See page 235).

#### Work during Vacation.

The laboratories of the department will be open to qualified students for research and private study during a part of the long vacation, but students are strongly recommended to employ the time in gaining practical experience in works whenever such a course is possible. The Professor will be glad to give advice before the end of the term as to suitable courses of vacation study, and to consider applications from students desiring the use of the laboratories. (See page 125).

## LEATHER INDUSTRIES

Assisted by the Skinners' Company of the City of London and by Members of the Leather Trades

Professor Procter
Mr. Kopecky . Mr. Brumwell

Mr. BENNETT

The object of the courses of study in this department is, in the first instance, to familiarise students, both by information in lectures and by practical handling of the materials, with the details of the tanning process and the reasons why particular modes of treatment produce partic-This knowledge once gained, the student is in a position to judge of the causes of defects, and the changes which it is necessary to make to prevent or remedy them or to modify the leathers produced in such a way as may meet the requirements of the trade. Methods of chemical and microscopic analysis are also taught and practised for determining the purity and value of the various materials employed, and for checking their use in the different stages of the process. In the latter part of the course, students are given the opportunity to take part in the practical production of leathers in which they are interested, and to study the smaller details of the processes. Particular attention is paid to leather dueing and the manufacture of coloured

The courses of study have been arranged to meet the requirements of different classes of students as follows:

- 1. A course for the degree of B.Sc. in the Honours School of Applied Chemistry (Chemistry of Leather Manufacture).
- 2. A course for the Ordinary degree of B.Sc.
- 3. A course for the diploma in Leather Manufacture.

Shorter courses of study will be arranged for students who cannot afford the necessary time for a degree or diploma course, but in no case can a student be allowed to work in the Leather Industries laboratories until he has satisfied the Professor that he has the requisite

<sup>1</sup> For fuller information, including description of laboratory equipment, see the special Prospectus of the Leather Industries Department, to be obtained from the Registrar on application.

preliminary training in chemistry. Some previous acquaintance with actual leather manufacture is very desirable before taking the University courses.

The International Association of Leather Trades Chemists, which now includes most of the leading chemists of the manufacture, demands as a condition of membership a three years' course of study of pure chemistry of University standard, or the evidence of an equivalent knowledge, and at least one year's experience in the laboratory of a leather works or leather industries school. Students who desire membership in this Association are recommended to take the course prescribed for the B.Sc. degree with Honours, though a less qualification may be accepted.

## I. Honours Degree Course

(Four Years)

For particulars see page 230, and the details given below respecting the course for the Ordinary degree.

## II. Ordinary Degree Course

(Three Years)

For first year's course, see page 217.

Second Year	Third Year
Hours	Hours
per week	per week
Chemistry Lectures . 6 :	Organic Chemistry 3
Chemical Laboratory	General Engineering (IIA) 3
(average) 12	Chemistry and Physics of
Principles of Leather	Leather Manufacture 2
Manufacture (1st and 2nd	Methods of Leather Manu-
terms) 3	facture 3
Analytical Chemistry of Leather	Technical Bacteriology (3rd
Manufacture 1	term) 2
Technical Microscopy (3rd	Chemical Laboratory
term) 1	(Organic) 6
Leather Industries Laboratories	Leather Industries Labora-
and Workshops (average) 6	tories and Workshops 12

Fees (including Union fee) second year, £26 2s.; third ear, £28 9s. 6d.

## III. Diploma Course (Three Years)

This course is suitable for those who intend to become technical managers in leather works, and is recommended to sons of tanners and others who require a practical knowledge of the science and technology of the industry, but are unable to take a degree course.

First Year	Second Year	
Hours	Hour	15
per week	per we	ek
Chemistry, General Course 3	Organic Chemistry 3	3
Chemical Laboratory . 18	Principles of Leather	
Mechanical Drawing 3	Manufacture (1st and 2nd	
Leather Industries Workshops 3	terms)	,
isencine since and a recommendation of	Technical Microscopy (3rd	,
!	. , , ,	
	term) 1	L
	Analytical Chemistry of	
	Leather Manufacture 1	į
į	Chemical Laboratory	
i	(Organic) 6	,
i	Leather Industries Labora-	
·	tories and Workshops 15	•
<i>(11)</i> • 1	, ,	
Third		
	Hours	
., ., .,	per week	

Fees, (including Entrance and Union fees), first year, £25 6s. 6d.; second year, £24 18s.; third year, £25 5s. 6d.

In awarding this diploma, in addition to any special examinations which may be imposed, the University will take into account the result of all terminal examinations during the course, and students failing in any of these may be disqualified, or required to repeat that part of the course.

Students who give evidence of adequate previous scientific or practical training, may upon application, be admitted to the diploma upon a shortened period of study. Students who have already practical knowledge of Leather Manufacture may be exempted from a portion of the Leather Industries Laboratory work for the diploma.

#### LECTURE COURSES

#### I. The General Principles of Leather Manufacture

Lectures on Mondays, Wednesdays, and Fridays, at 10.30 a.m., during the 1st and 2nd terms.

Character and sources of hides and skins used in Leather manufacture, their structure and constituents; preparation for tannage, including soaking, liming, and other preliminary processes, and the chemistry involved: the vegetable tanning process and its materials, with special reference to the heavier leathers; mineral and special tanning processes, including chrome tanning, oil dressing and the use of formaldehyde, principles of currying.

Fee, £2 128. 6d.

#### II. The Chemistry and Physics of Leather Manufacture

Lectures on Tuesdays and Thursdays, at 10.30 a.m., throughout the session.

The more detailed anatomical and chemical structure of skin and its constituents; physics of evaporation, drying, heating, and ventilation; the physical chemistry of the limeyard and tannery; theories of the tanning process; chemistry of the tannins and their derivatives; developments of colloidal chemistry bearing on the tanning process; chemistry of oils and fats, and of currying and oil dressing.

Fee, £2 128. 6d.

#### III. Methods of Leather Manufacture

Lectures on Tuesdays, Thursdays, and Saturdays at 9.30 a.m. throughout the session.

The manufacture and finishing of sole leather; manufacture of belting and dressing leathers. Currying. Manufacture of Moroccos and other fancy leathers; staining; dyeing, and finishing; oil and fat tannages, including so-called "rawhide" leathers; alum dressing, including glove and calf-kid; combination tannages; chrome and formaldehyde tannages.

## Fee £3 13s. 6d.

These lectures will be in connexion with the practical work in tanning, currying and leather dyeing carried on in the Leather Industries laboratories and workshops.

#### IV. Analytical Chemistry of Leather Manufacture

Lectures on Saturdays at 10.30 a.m. throughout the session. Including the analytical investigation of the following: waters; liming and deliming materials; lime liquors, tanning materials; extracts; tanyard liquors; gelatine; glue; soaps, oils, fats and waxes; mineral and vegetable tanned leathers; tannery effluents.

These lectures will explain the analytical methods in use in the Leather Industries Laboratories

Fee £1 11s. 6d.

#### V. Technical Microscopy

Lectures on Mondays at 10.30 a.m. during the third term.

The use of the microscope in the examination of skin and leather, and in the detection of adulterants, in connexion with work carried on in the laboratories.

Fee 10s. 6d.

#### VI. Technical Bacteriology and Mycology

Lectures on Wednesdays and Fridays, at 10.30 a.m. during the third term.

These lectures will be specially devoted to the bacteriology and mycology of leather manufacture, but will aim at giving a sound foundation in general technical bacteriology, and, in common with course V, may be attended with advantage by students from other departments. Work in this subject will be carried on in the laboratory during the third term

Fee £1 1s. od.

#### LEATHER INDUSTRIES LABORATORIES

The laboratories and workshops will be open during the session from 9.30 a.m. to 1 p.m., and from 2 to 5 p.m., except on Saturday afternoons.

All the ordinary chemicals (except silver nitrate and alcohol) and small quantities of skin and leather for experimental purposes will be furnished by the Department, but larger quantities required for special experiment or research may be charged to or provided by students at the discretion of the Professor.

For fees, see page 120.

Tanning. Practical instruction will be given in the various modes of conversion of skin into leather and illustrated by actual production from the raw material.

Leather Dreing and Staining will form part of the regular course and will be taught by experimental dyeing and staining in the laboratory, and by practical work on a larger scale in the workshops.

Practical Microscopy and Bacteriology. Instruction on these subjects will be given during the third term in the laboratory of the Leather Industries department, and will form part of the ordinary laboratory work of students in the department.

Microscopes must, as a rule, be provided by the student, but one or two may be hired of the Department. For bacteriological work each student must be provided with t/t2th oil immersion objective and substage condenser; but for the study of skin and leather only a simpler microscope will suffice.

#### Work During Vacation

Students in the Leather Industries Department are referred to page 125. The laboratories of the Department will be open to qualified students for research and private study during a part of the long vacation, but students are strongly recommended to employ the time in gaining practical experience in works wherever such a course is possible. The Professor will be glad to give advice before the end of term as to suitable courses of vacation study and to consider applications from students desiring the use of the laboratories.

## **Evening Course**

See under Evening Classes, page 359.

#### AGRICULTURE<sup>1</sup>

Professor Seton

Mr. Haydon Mr. Archibald Dr. Crowther Mr. Bowes Mr. Stewart Mr. Ruston Mr. Parton Mr. T. Redington Mr. Gaut Miss McKerrow Mr. Anstey

The Winter Course will begin on Monday, October 14, when the Vice-Chance? or will admit students from 9 30 a.m.

<sup>1</sup> For further details and time-tables of courses of study, see the prospectus of the Department of Agriculture, to be obtained from the Registrar on application.

to 12.30 p.m., and from 2 to 5 p.m. All students are expected to register their names on this day. Lectures will

begin on Tuesday, October 15.

The Winter Course extends over two terms: the first term begins October 14, and ends December 21, 1907; the second term begins January 6, and ends March 14, 1908. The fee is £10.

The Summer Course extends over the third term, beginning April 22, and ending July 4, 1908. The fee

is £,5.

Students may reside either in Leeds or in the village of Garforth, which is about three-quarters of a mile from the Farm. They will be required to pay their railway fares between Leeds and Garforth. The cost of a contract ticket between Garforth and Leeds during the Winter Course (five months) is £.2 7s., and for students under 18 years of age £1 3s. 6d.

The courses of study in Agriculture at the University

are:

- 1. A general course designed without reference to the requirements of any examining body.
- 2. A course for the National Diploma.
- 3. A course for the B.Sc. degree.

## I and II. General and National Diploma Courses Winter Course

Students may obtain a full course during winter, and are free to devote the spring and summer months to practical farm work.

The instruction has been arranged to meet the requirements of young men who intend to become farmers, land agents, valuers, or teachers of agricultural science.

The complete course extends over three winters, but students may take a one or two winters' course. The complete course prepares students for the examination for the National Diploma in Agriculture, awarded jointly by the Royal Agricultural Society of England and the Highland Society of Scotland. Students are also prepared for the examination of the Surveyors' Institution. Students of the University who have taken the two years' course in Agriculture are admitted to the examinations of the Institution

in Sub Division 1, "chiefly Land Agency," without the usual period of pupilage in a land agent's or surveyor's office.

A Laboratory for the exclusive use of Agricultural students has been added to the Department, and will be open on special terms to those who wish to devote their whole time to agricultural chemical analysis.

Practical instruction in Agriculture is provided for at the Educational Farm at Garforth. In addition to the lectures at the University, students must attend regular classes at the Farm, where class-rooms and laboratories have been erected, in which classes will be conducted according as it is found necessary.

All students taking a full course will be required to follow closely the farm work, including field operations, methods of feeding stock, and progress of experiments.

A Tutor has been provided to supervise the studies of first year students. Tutorial classes will be formed to suit their requirements.

#### Summer Course

A special course has been arranged for students who can devote the summer as well as the winter months to study.

The subjects will comprise agricultural chemical analysis, forestry, horticulture, poultry keeping, dairy bacteriology, field surveying and levelling, mathematics, and practical agriculture.

Students reading for the National Diploma are recommended to take the Summer course in their first year.

## III. Degree Course

Students preparing for the degree of Bachelor of Science who take Agriculture as one of their subjects for the Final examination, do not enter the Department of Agriculture until they have passed the Matriculation and Intermediate examinations and begin the work for the Final examination. The subjects of examination and attendance conditions will be found under the Regulations for the degree of B.Sc., see page 210.

#### LECTURE COURSES

#### First Year

#### I. Agriculture

Professor Seton

Tuesdays, Wednesdays, and Thursdays, at 9.30 a.m.

The lectures will deal especially with soils, manures, rotations, seeds, grasses, and pastures.

#### II. Physics and Chemistry

Tuesdays, Wednesdays, and Thursdays, at 10.30 a.m. Physics and Chemistry so far as is sufficient to enable students to understand thoroughly the application of these sciences to agricultural practice

#### III. Tutorial Classes

Mondays at 9.30, Thursdays and Fridays at 11.30 a.m. Correspondence, calculations, elementary mathematics preparatory to book-keeping, surveying, and engineering.

#### IV. Chemical Laboratory

Mondays and Wednesdays, from 2 to 5 p.m.

Selected experiments arranged to illustrate the chemical and physical principles underlying agricultural operations.

## V. Practical Agriculture

Tuesday and Friday afternoons, at Garforth.

Stock: stock-feeding; estimation of weights of crops and animals; pastures, pasture plants; practical examination of seeds, manures, and feeding stuffs

Seasonable operations will be closely followed; different systems will, so far as practicable, be illustrated, and the reasons for the variations explained. Students will be required to closely follow stock-feeding and other experiments at Garforth. Occasional demonstrations will be given by specialists in certain departments of practical agriculture.

## VI. Natural History

In the Department of Botany. (See page 252).

# Second and Third Years

# VII. Agriculture

Mr. HAYDON and Mr. ARCHIBALD

Lectures daily, except Saturdays, at 10.30 a.m.

Feeding stuffs; crops and cropping; live stock; labour and implements; agricultural economics.

## VIII. Chemistry

Dr. CROWTHER

Mondays, Tuesdays, and Thursdays, at 9 30 a.m.

The chemical elements; the atomic and molecular theories; atomic and molecular weights; chemical combination: the chemistry of the more common elements and of their most important compounds; the chemistry of carbon and of some typical carbon compounds important in agriculture; chemistry of fermentation.

# IX. Agricultural Chemistry

Dr. CROWTHER

Wednesdays, Thursdays, and Fridays, at 11 30 a.m. The plant: the soil: manures: crops: animal nutrition; the dairy.

# X. Book-keeping

Mondays at 11.30 a.m., and Fridays at 9.30 a.m.

Accounts, day book, cash book, ledger, balance sheet, profit and loss account, &c.

#### XI. Mathematics

Tuesdays at 11.30 a.m.

This class will be largely tutorial. The subjects taken will be arranged to suit the requirements of the student. In addition to Mathematics as required for examination the course will include practice in all calculations that an agriculturist would be required to make in the course of a year.

# XII. Chemical Laboratory

Tuesdays, 10.30 a.m. to 12.30 p.m.; Thursdays, 2 to 4 p.m.; Saturdays, 9.30 a.m. to 12.30 p.m.

Chemical analysis, with special reference to Agriculture.

# XIII. Veterinary Science

Mr. Bowes

Mondays, Tuesdays, Wednesdays and Thursdays at 9.30 a.m.

Anatomy and physiology of farm animals; recognition of diseases affecting farm animals; means of preventing disease, including ventilation, drainage, judicious feeding, grooming; nature of heredity, contagion, infection.

#### XIV. Practical Agriculture

Classes at the Farm on the same lines as for first year students, with the addition of practical demonstrations by Mr. Bowes on conformation, handling, &c., and generally the application of veterinary hygiene to farm animals.

# XV. Surveying

Mr. Archibald

Mondays at 9.30 a.m and 4 p.m.

Revision classes for those students who have taken this subject in the summer term.

# XVI. Agricultural Botany

In the Department of Botany. (See page 252.)

# XVII. Economic Entomology

In the Department of Zoology. (See page 249.)

# XVIII. Geology

In the Department of Geology. (See page 255).

# XIX. Agricultural Engineering

In the Department of Engineering. (See page 259).

# Summer Course

XX. Dairying

Mr. HAYDON

Tuesdays, Thursdays and Fridays at 9.30 a.m.

Commercial aspects; quantity and quality of milk; butter-making; manufacture of Cheddar, Stilton, Cheshire

and Wensleydale cheese; utilization of by-products; general management of the herd; live and dead stock and buildings required on cheese-making farms; dairy bacteriology.

## XXI. Practical Agricultural Chemistry

Dr. CROWTHER.

Mondays and Thursdays at 2 p.m. Qualitative and quantitative analysis.

#### XXII. Horticulture

Mr. T. REDINGTON

Tuesdays at 10.30 a.m.

Preparation of the soil; manure; seeds and their treatment; garden crops; fruit culture: the flower garden.

# XXIII. Poultry Keeping

Mr. Parton

Mondays and Wednesdays at 11.30 a.m.

Breeds and their characteristics: the anatomy of the fowl; embryology of the chicken; incubation; rearing chickens; foods; methods of fattening; marketing produce; diseases of poultry.

# XXIV. Surveying

Mr. Archibald

Tuesdays, Thursdays, and Fridays at 11.30 a.m.

Students will be required to make a survey of a part of the Manor Farm, Garforth, and to plot the same in the office. In addition to chain, compass, theodolite, and level, students will have an opportunity of using other instruments.

# XXV. Forestry

In the Department of Botany. (See page 252).

# County Lecture Courses

For particulars of instruction given in connection with the County Councils of the three Ridings of Yorkshire, see page 388.

#### Time Tables of Arts Courses

	9.30	10.30.	11.30.	લં	ri,	4
Мочрау	Latin.	English Literature.	English Literature. French II. Chem. Mathematics	Mathematics	German, Physics.	French III.
TUESDAY.		Latin Comp. Geology I.	Ancient History.	:		:
Wednesday	Latin.	English Literature, Trench II. Chem	I rench II. Chem	Logic. Mathematics.	German, Physics	French III. Physics.
THURSDAY	Physics.	Geology I.	Ancient History.		-	:
FRIDAY .	Latin.	English Literature	French II. Chemistry.	Logic.	German. Physics	French III. Physics.
SATURDAY	:	(reology I.		:		•

TIME TABLE OF INTERMEDIATE ARTS COURSES

The time for the English Language and Nodern History Classes to be arranged with Students

# TIME TABLE OF FINAL ARTS COURSES

				!		
Moveav	Greek, † German, English Literature, English Hist, †	English Literature.	Latin - Mathematics. European Hist †	French. European Hist. Feenomies	t. ' (ireek. *	Latin. † Education. *
TLESDAY .	Grk. + Grk. & Rom. Hist. + Education +	Education. ‡	Latin Comp. 7		French Literature.	(ierman Interature (ixt and 2nd terms).
Wednesday	Greek, † German. English Hist †	Greek, † German. English Literature , European Hist. English Hist † Mathematics.	Latın. * European Hist. † Mathematics.	French. Economics	Education Disc. (Liss (1st and 2nd terms).	Latin. † Education. *
Тникърач	Greek and Roman History. † Education. †	European Hist. * Education. ‡	-	Education	Education Criticism Lessons	·
FRIDAY .	Greek, † German, Greek, * English Hist. † English Literature.	Greek, * English Literature.	Latin. *	French. Economics.	Greek Comp. *	Latin. † Education. *
SATURDAY	:	:		:	•	
* First Year. Greek Comp English Lite	inst Year. †Second Year. †Third I Greek Composition, one hour, second year. English Literature and Language, one hour.	Year. r,	At times to be arranged:— Economics, second year. Psychology, three hours.		History of Ancient Philosophy, three hours.	sophy, three hours.

# GENERAL TIME TABLE

	9, 30 - 10, 30,	10.30 11.30	11.30—12.30.
Monday.	Greck V.  Latin H German IV.  History IX.  Math. IV and VII. Chem. V B a. Chem. V B b. Botany Lc. 9, 30-11 30 Bot. V c. Geology XIII b c. Engineering II A. Mining II. 9, 30-11, 30. Text I (2nd year). Agric. III a b, VIII a b, XIII & XV a b	Greek VI. Latin I. Eng. 11 and IV A. German VIII. Final Law I. Physics III. Zool, I and II a b. Botany I c. 10 30-12 30. Bot III a b. Engineering VI. Leather Ind. I a b. Leather Ind. V c. Agne, VII a b	Greek II, Latin III. French II. History VIII. Final Law II. Mathematics VI. Chemistry I. 2 Chem. V A a b. Geol. X a b. Elect. Eng. IV. Text. II (2nd yr.) a b. Agric. X a b. Agric. XXIII a
Tursday.	Greck IV, Latin V, French XI a b, History VI & VII, Education II, Physics I, Chem III and VD, 9,30-12,30, Zool, I a, II a (Pract.), Botany I (Pract.) b, Engineering IV, 9-11,30, Text. I (18t year), Dyeing I a and II b, Agric, I, VIII c, & XIII a b, Veric, XXV c, Leather III	Greek VI. Latm II (Comp). History I and IV. Education III A. Final Law III. 10 30-12, 30, Zool, II (Pract ) b. Geology I. Engrg, VII v a b. Ingrg, VII v a b. Leather Ind. II. Agric, II & VII a b. Agric, XII a b. Agric, XXII a.	Latin 111 and IV (Comp.).  History II.  English I.  Mathematics V.  C. Chemistry IV  Text. 11 (1st yr.) a b.  Agric. XI a b.  Agric. XXIV c
Wednesday.	Greek V. Latin II. German IV. History IX Math IV and VII. Chemistry II. Chemistry V B B. Chemistry V C B. Botany I C. Botany I C. Botany I C. Geology XIII B C. Engineering II A. Mining II. 9.30-12-30. Textile VIII (1st and 3rd years). Agric, I, XI and XIII B B. Dy, ng V B.	Greek VI. Latin I. English II and IV A. German VIII. Physics IV. Zool. I and II a b. Botany I (Piact.) c. Engineering VI. Leather Ind. I b. Agric, II & VII a b.	Greek II. Latin III. French II. History VIII. Mathematics VI. Chemistry I. 12 Chem. V A a b. Botany III a b. Geology IX. Geology IX a b. Agric. IX a b. Agric. IX a b.

# DAY CLASSES

-		- **	
2-3.	3-4.	4 - 5.	56.
French IV. German I. History V. Economics I. Inter. Law I. Math. I and III. 2-5. Zool. I (Pract.) a b. Geology II. Engrg. II B a b. Elect. Eng. I. Mining I. 2-5. Agric. IV a b. Ague, XXI c.	Greek 111 and 1V. French I. German 111. History XV. Inter. Law 111. Mathematics II. Physics II. (Exercise Class).	Latin IV. French III and VII. German II. Education I. Inter. Law II. Engineering I. Engrg. II c a c. Elect. Eng. II. Agric. XV a b.	5.30-7. Engrg. II (Lab.).
German VII. Final Law III. 2-5. Pract. Chem & c. Botany I c. 2-4. Geol. X (Pract.) a b. 2-5. Text. I (1st vi.). >-4. Text. III. Agric. XXIV c.	French V a b French VI c. German VI. Economics III. 3-5. Bot. I (Pract.) c.	German V. Feonomics II. Geology XII & c. Fingmeering III. Elect. Eng. III. Text. IV (and yr. a b. Dyeing III a k. Dyeing IV c.	
French IV. German I. Philosophy I. Economics I. Math. I and III. 2-4. Bot. IV a b. Geology II. Engrg. II B a b. 2-4. Text. VIII (1st and 3rd years). 2-5. Agric. XXIV c.	Greek III. French I. German III. Education III a & Accountancy I. Mathematics II. Physics II. 3-5. Textile VIII (1st year).	Latin IV. French III and VII. German II. Education I. Accountancy II. Physics II. Engineering I. Textile IV (1st year) a b.	
Classes not marked		<u> </u>	

Classes not marked meet throughout the Session.

# GENERAL TIME TABLE

	0.30-10.30	10, 30 - 11, 30,	11.30-12.30.
Thursday	Latin V.  Hist, VI and VII.  Education II.  Physics I.  Physics II (Exercise Class).  Chemistry III.  Engineering IV.  9.30-12.30. Elect.  Eng IV.  9-11.30. Lext. I  (1st year).  9.30-12.30. Toxt.  VIII (and & 3rd yrs.)  Dyeing I a & II b.  Agric I, VIII a b,  XIII a b, XX c.  Agric, XXV c.  9-30-12. Text VIII  (and and 3rd years).  Leather Ind. III.	Greek VI. History I and IV. Education III A Final Law I. Geology I. Engrg. VII a a b. Engrg. VII c c. Leather Ind. II. Agric. II & VII a b.	History II.  Latin I (Comp).  Final Law II.  Mathematics V.  12. Chemistry IV.  Zool. I (Revision) c.  Zoology IV a.  Engineering VIII b.  Text. II (1st year) a b.  Fext. VIII (2nd year).  Agric. III & IX a b.  Agric. XXIV c.
FRIDAY.	Greek V. Latin II. German IV. History VIII & XIV Math. IV and VII. Chemistry II. Chemistry V E a. Chem, V c b c. 9.30-11.30, Zool. I (Revision). 9.30-11.30, Zool. IV (Pract.) a 9.30-11.30, Bot. III a b Geology XIII b c. Engineering II v. Mining II. Text. III a b. Agric X a b. Agric X X V	Greek IV. Latin I. Engl. II and IV A. German VIII. Final Law I. Physics III. Zoology I a. Botany I b. Zoology II a b. Fingineering VI. 10.30-12.30. Text. I (2nd year). Leather Ind. I a b. Agric VII a b.	Greck II. Latin III. French II. Final Law II Mathematics VI. Chemistry I. 12. Chem. V & a b. Geology IX. Geology X a b. Agric, III & IX a b. Agric, XXIV c.
Saturday	Greck I. Latin V. Physics I (Exercise Class). Chemistry III. 9.30-12 30. Zool. V. Engineering VIII a. 9.30-12 30. Agric. XII a b. Leather Ind. III. Dy ang V b.	Greek II (Comp.). Latin V (Comp.). 10.15-12-15. French 1X and X. 10-15-12-15. German IX and X. Geology I. Engineering IV. Engineering VII B. Leather Ind. IV.	Greek VI (Comp.). 12. Chemistry IV. Engineering 111.

# DAY CLASSES. (Continued.)

2 - 3,	₹4•	45.	56.
English I & c. German VII. Education III n. Education VIII. 2-5. Prac. Chem. & c. Botany I c. Eng. II n a b. 2-5. Text. I (1st yr.). 2-4. Textile III 2-4. Textile VIII (2nd and 3nd years). 2-4. Aguc. XII a b. 2-5. Aguic. XXIV c.	German VI. 3-15-4.45. Education I. 11 and HI (Criticism). Economics HI 3-5. Botany I (Pract)	Inter. Law II. Economics II. Engineering III. Elect. Eng. I. Text. V (2nd yr.) a b. Dyeing III a b. Dyeing IV c.	
French IV. German I. Philosophy I. Final Law III. Economics I. Math. I and III 2-4. Zoology II (Pract.) & Botany IV a & Geology II, Elect. Eng. I. 2-5. Text. I (2nd yr.).	Greek III. Gk. IV (Comp.). French II. German III. Mathematics II. Physics II.	Latin IV. French III & VII. German II. Education I. Physics II. Engineering I. Elect. Eng. IV. Text. V (1st year)	

Classes not marked meet throughout the Session.

# Course for the First Examination in Medicine

#### Time Table-First and Second Terms

ſ	9.30 10.30.	10.30-11.30.	11.3012.30	2.0 - 3.0.	3 0-4.0.	4.0-5.0.
MON.		Zoology Lect.	Chem. Lect. (Gen. C.)	Zoology (L	aboratory W	ork) 2.0 ·5.0
TUE.	*Zoology(La †Botany (La	boratory Work	3 ) 9.30 -12.30 3 ) 9.30 - 12.30	Chemic	al Laborator	у, 2.05 0
WED.		Zoology Lect.	Chem Lect. (Gen. C.)	Chem. Tutorial.		Physics Lect.
THU.	Physics. Lect.			Chemic	al Laborator	y, 2.0- 5 o
FRI.		Zoology(Lect. †Botany(Lect.		Chem	Lab. 2-4.	Physics Lect
SAT.	Physic	al Laboratory	0 3012.30	••		

#### \* 1st Term. † 2nd Term

#### Third Term

	9.30-10.30.	10.3011.30	11 30 12,30	2,03,0,	3.0 - 4.0.	4.0-5.0.
Mon.	Botany.	Botany Lab.	Chem. Lect.	Chemic	al Laborator	y, 20 -5.0
TUE.	Chemical	Laboratory.	9.30-1230	Botany Lect.	Botany Lab	5., 3.0-5.0
WFD.	Botany	Botany Lab.	Chem. Lect.	Chem. Tutorial.		Phys. Lect.
Тис.	Phys. Lect.	Chem. Tutorial.	Zool. Revn.	Botany Lect.	Botany Lab	y., 3.0 5.0
Fĸı.	1	Laboratory.	Chem. Lect	Chem.	Lab. 2 - 4.	Phys. Lect.
SAT.	Physical	Laboratory,	9 20 -12 30			

This Course will meet the requirements of students preparing for the First examination in Medicine or Parts I and II of the First examination in Dental Surgery of the University of Leeds. It includes lectures in Chemistry, Physics, Zoology and Botany, with the requisite attendance in the Chemical, Physical, and Biological laboratories.

Composition fee for the course, including Union fee (excluding Zoologica, Revision Class) £,26 10s. 6d.

Students preparing for the Conjoint Board Examinations (L.R.C.P. and M.R.C.S.) will attend classes in Physics (lectures and laboratory as above), Chemistry (lectures and laboratory as above), and Zoology and Botany (see pp. 246-253). Composition fee for the course (including Entrance fee and Union fee), £22 175. od.

Students preparing for the Preliminary examination in Science for the Diploma in Dental Surgery, will attend classes in Physics and Chemistry, as above. Fee for the Session (including Entrance fee and Union fee), £19 8s. 6d. For six months only, £14 14s.

## THE UNIVERSITY OF LEEDS

Session 1907-1908

# The School of Medicine

The University session or academic year in the School of Medicine is divided into three terms. The first term begins Tuesday, October 1, 1907, and ends Friday, December 20, 1907; the second term begins Monday, January 13, 1908, and ends Saturday, March 28, 1908; the third term begins Wednesday, April 22, 1908, and ends Saturday, July 11, 1908.

The terms for students pursuing the first year's course of study are the same as those in other Faculties (see page 117).

#### ADMISSION OF STUDENTS

The Dean will enter students in the School of Medicine for their courses of lectures from 9.30 to 10 a.m., on October 1, 2, and 3, 1907; and on April 22 and 23, 1908. The Fees due must be paid at the same time to the Registrar, who will be present to receive them.

The Dean is generally in his office, in the School of Medicine, from 9 to 10 a.m. daily, and can be seen at other times by appointment. Enquiries about medical studies should be addressed to him.

Applications to attend the instruction on Infectious Diseases at the Leeds City Hospitals, and to attend instruction in Vaccination, must be lodged with the Dean in the first week of each term.

Enquiries relating to hospital attendance should be addressed to the Secretary of the Faculty of the General Infirmary, Mr. Walter Thompson, 4, Park Square, between the hours of 11 a.m. and 1 p.m.

Every student is required on entering the School to sign the following declaration:

I, the undersigned, being a student in the School of Medicine of the University of Leids, hereby undertake to comply with all rules and regulations of the University, and to conduct myself on all occasions in an orderly manner. I fully understand that no allowance whatever will be made, and that I have no claim upon the Council of the University in respect of any fees paid by or due from me, in case uch fees are forfeited by any irregularity or misconduct on my part.

Students pursuing the first year's course of study are admitted at College Road according to the arrangements published on page 117.

#### **ENTRANCE EXAMINATIONS**

# For students preparing for the Degrees of M.B., Ch.B., in the University of Leeds

All students who intend to present themselves as candidates for the degrees of M.B., Ch.B., in the University of Leeds are required, before entering upon their degree course, to have passed the Matriculation examination (Faculty of Medicine) of the Universities of Manchester, Liverpool, Leeds, and Sheffield, or some examination recognised by the Joint Matriculation Board of those Universities as exempting from the Matriculation examination.

The Matriculation examination (Faculty of Medicine) is held at each University in July and September. Candidates presenting themselves for this examination are required to satisfy the Examiners in:

- 1. English (Language or Literature), and English History
- 2. Mathematics
- z. Latin
- 4. Two of the following, one of which must be a language:
  - i. Greek
  - ii. French
  - iii. German
  - iv. Some other modern language approved by the Board
  - v. Elementary Mechanics
  - vi. Chemistry
  - vii. Geography or Natural History

Candidates who have passed the Matriculation examination in five subjects, but have not included both Latin and either Greek or a modern language, will be deemed to have passed the Matriculation examination (Faculty of Medicine), provided they satisfy the Examiners in the subject omitted.

Candidates for entrance to the Faculty of Medicine who have already obtained the certificate of having satisfied the Examiners in English subjects, Mathematics, Latin, and another language, will be deemed to have passed the Matriculation examination (Faculty of Medicine), provided they satisfy the Examiners in one other subject in the Matriculation examination.

# Conditions of Exemption from the Matriculation Examination

A student is entitled to exemption from the Matriculation examination provided he has satisfied any one of the five following conditions:

- (a) Has passed Responsions of the University of Oxford, including both Geometry and Algebra, and one Additional Subject.
- (b) Has passed Parts I and H of the previous examination of the University of Cambridge, and also passed in one of the Additional Subjects of that examination.
- (c) Has gained a Higher Certificate or Higher Certificates of the Oxford and Cambridge Schools Examination Board, including (1) one foreign language, (2) either English or English History, in either case with English Essay; (3) Elementary Mathematics together with Algebra and Geometry as required for passing in Additional Mathematics; (4) two other subjects (of which Scripture Knowledge shall not be one) which may include the alternative subject not taken under (2) and Additional Mathematics.
- (a) Has obtained an Oxford Senior Local Certificate, provided that the candidate has passed at one and the same examination in (1) English Language and Literature, including Composition (2) Arithmetic, Geometry and Algebra, and (3) either History or Geography, and two of the following nine sections, one at least being a language, namely, (4) Latin, (5) Greek, (6) French, (7) German, (8) Italian, (9) Spanish, (10) one subject in Higher Mathematics, (11) Chemistry, (12) one subject in Physics.
- (e) Has obtained a Cambridge Senior Local Certificate, provided that the candidate has passed at one and the same examination in (1) English Language and Literature, including Composition, (2) Arithmetic, Geometry, and Algebra, and (3) either History or Geography, and two of the following eight sections or parts of sections, one at least being a language, namely, (4) Latin, (5) Greek, (6) French, (7) German; (8) Spanish, (9) an additional z.bject in Mathematics, (10) Chemistry, (11) one subject in Physics.

The holder of a certificate who desires exemption must submit the certificate to the Secretary for verification of the subjects.

The fee charged for registering an external Certificate is  $\mathcal{L}_{i}$ .

# Faculty of Medicine

The Board will grant exemption from the Matriculation examination to graduates of any University of the United Kingdom, provided Latin has formed part of one of the degree examinations.

Provided that the certificate shows that all the subjects required by the General Medical Council have been included, the Board is prepared to receive applications for exemption from persons who hold certificates of having passed the London Matriculation examination.

The Board will exercise its discretionary power of granting exemption to applicants holding certificates of having passed examinations of a standard at least equal to those above mentioned.

A complete syllabus of the examination may be obtained from the Secretary, the Joint Matriculation Board, Owens College, Manchester, to whom all applications for exemption should also be addressed.

#### 2. For other Students

Students who intend to pursue the study of Medicine without becoming candidates for the degrees of M.B. and Ch.B. in the University of Leeds are admitted to the Leeds School of Medicine on presenting certificates of having passed one of the preliminary examinations recognised by the General Medical Council. The Joint Matriculation Board of the Universities of Manchester, Liverpool, Leeds, and Sheffield issues such a certificate to candidates who have satisfied the examiners at the Matriculation examination (see above) in English subjects, Mathematics, Latin, and another language, although they may not have passed the examination. This certificate does not entitle the candidates to proceed to degrees in any of the Universities.

Candidates for the Medical degrees of the University of London must satisfy the Matriculation requirements of that University before beginning a course of study in the Leeds School of Medicine.

#### **FEES**

All fees are payable in advance to the Registrar. Cheques should be made payable to "The University of Leeds," and crossed "Beckett & Co."

## 1. and 2. Entrance and University Union Fees

As in the other Faculties. See page 119.

#### 3. Lecture and Laboratory Fees

The general regulations, as well as the special regulations for lecture, laboratory, and research fees, are the same as in the other Faculties (see page 119). The following are the composition fees for students preparing for University degrees in Medicine:

i. For the complete course qualifying for the First examination of the University, or the Preliminary Scientific (M.B.) examination of the University of London, the fee is

£,26, exclusive of Entrance and Union fees.

ii. For students preparing for University degrees, who have already taken the course of instruction for the First examination of the University, or the Preliminary Scientific (M.B.) examination of the University of London, the fee is £73 2s. 6d. if paid in one sum on entrance, or £37 12s. on entrance and £37 12s. at the end of twelve months, and entitles to attendance upon one course of the subjects in Sections I and II. The privilege extends over six years only from the date of the first instalment.

iii. For students preparing for University degrees who have passed the Second examination (Anatomy, Physiology, and Materia Medica), the fee is £48 16s. 6d., and entitles to attendance upon one course of the subjects in Section II. The privilege extends over four years only.

SECTION I.

Descriptive Anatomy, Juniorand Senior Sections.

Use of Dissecting Room with tutorial instruction for two sessions.

Physiology, general and advanced courses. Practical Physiology and Histology. Materia Medica. Fees 311

SECTION II.

Obstetrics.

Intern Maternity

Pharmacology and Therapeutics Practical Pharmacy. Pathology and Bacteriology. Practical Pathology. Medicine.

Do. a second course. Surgery. Practical Surgery.

Gynæcology.
Forensic Medicine.
Practical Toxicology.
Mental Diseases.
Ophthalmology.
Public Health.
Applied Anatomy.
Infectious Diseases
Vaccination

Additional courses of lectures and practical or tutorial classes which may be rendered necessary by failure to pass any examination, or by the refusal of the Board of the Faculty of Medicine to certify satisfactory attendance on any course, will be charged for as the Board may direct.

#### 4. Examination Fees

No fee will entitle to admittance to more than one examination.

For the First examination for the degrees of M.B. and Ch.B.,  $\mathcal{L}_5$ ; and for each subsequent examination,  $\mathcal{L}_2$ .

For the Second examination for the degrees of M.B. and Ch.B.,  $\pounds_5$ ; and for each subsequent examination,  $\pounds_2$ .

For the Final examination for the degrees of M.B. and Ch.B., £5; and for each subsequent examination, £2.

For the examination for the degree of Ch.M., £5; and for each subsequent examination, £2.

For the examination for the diploma in Public Health, £5 5s. for each part, and for each subsequent examination in the same part, £3 3s.

On application for the degree of M.D., £5.

# 5. Degree Fees

On conferment of the degree of Ch.M. or M.D., £5.

#### REGULATIONS FOR STUDENTS

1. All students are required to enrol their names at the Dean's office at the beginning of the first and third terms. Students who from any unavoidable cause are prevented from personally attending at that time must communicate with the Dean by letter.

- 2. Should a student change his residence during the session, he must inform the Dean of the change of his address without delay.
- 3. Regular, punctual, and orderly attendance at lectures, demonstrations, and class-examinations is required of every student, in order to obtain certificates of attendance. In the case of persistent neglect of work, repeated failure at professional examinations, or unreasonable delay in presenting himself for such examinations, a student may be required to withdraw from the University.
- 4. In case of illness or other unavoidable cause of non-attendance at any lecture, demonstration, or class examination, a written explanation accompanied, when necessary, by a medical certificate, must be sent to the lecturer, with as little delay as possible, otherwise excuses for absence cannot be accepted. Hospital work is not counted as an excuse for non-attendance upon lectures excepting in the case of the week's casualty dressership and for attendance upon actual cases of midwifery, all of which must be duly certified.
- 5. Prizes will be granted only when the work and conduct of the student are satisfactory, and certificates or prizes may be refused on the ground of unsatisfactory conduct.
- 6. Smoking is allowed only in the Students' Common Room, the Refectory after 1 p.m., and under certain restrictions in the Dissecting Room.
- 7. Students will be required to make good, to the satisfaction of the Council, any loss, wilful damage or injury they may occasion to the property of the University.
- 8. Students in the School of Medicine are amenable to the discipline and general regulations of the University (see page 124), as well as to the rules made by the Board of the Faculty of Medicine. Violation of these regulations and rules renders a student liable to immediate dismissal, and to the forfeiture of all fees, certificates, and privileges as a student of the University.

#### Lockers

Lockers are provided for the safe keeping of coats, books, &c. The rent is 2s. 6d. per annum, commencing October 1 or May 1, with a deposit of 1s., which will be returned when the key is given up, if the locker is undamaged.

#### Residence

See particulars of Hall of Residence (page 126), and Registered Lodging and Boarding Houses (page 127).

#### Refectory

A well-appointed Refectory, which is open daily, excepting Saturdays, has been provided in the School of Medicine. It is under the combined management of the Board of the Faculty of Medicine and of the Students' Representative Council. Dinner is served from 12 to 2 p.m. Tea, coffee, and light refreshments may be obtained until 5 p.m.

Dinners for each separate term may be compounded for by special arrangement.

#### LIBRARY

Honorary Librarian: Professor Trevelyan Assistant Librarian: W. Merriman

The Library contains a valuable collection of books, composed of the united libraries of the School of Medicine and of the Leeds and West Riding Medico-Chirurgical Society, and is being continually increased. The Library of the Old Infirmary, rich in medical classics, became the property of the School of Medicine in 1865.

#### Pulee

- 1. The Library is open to students daily, between the hours of 9 a.m. and 5 p.m., except on Saturdays, when it will be closed at 1 p.m. During these hours, books can be obtained for use in the Library on application to the Assistant Librarian.
- 2. Students wishing to borrow books for home use are allowed to do so under the following regulations:---
  - (a) Every student wishing to take books away from the Library shall deposit half-a-guinea as caution money; this sum, or the balance of it remaining, shall be refunded to the depositor on the return of his Library card.
  - (b) The student will, on payment of the deposit, receive a Library card with his name upon it. This card must always be presented to the Assistant Librarian or his substitute whenever the student desires to borrow a book. The name of the book and date of issue will be entered upon the card, which will then be placed on the shelf in the place of the book borrowed. The card will be given back to the student when the book is returned.

- (c) Books borrowed for home use must be returned to the Library within two weeks from the date of issue. One volume only can be borrowed at a time. A fine of 2d. a day is incurred for every day that it has been detained beyond the time allowed.
- (d) No periodical for the current year may be removed from the Library.
- (e) In case of loss of or damage to any book, the loss of damage must be made good by the borrower.
- (f) Every book must be returned to the Library at the end of each term.

NOTE.—Practitioners residing in Leeds or its neighbourhood may be admitted to the use of the Library upon certain conditions, and upon the payment of a subscription.

#### MUSEUMS

The Museum of Pathology contains, in addition to preparations illustrating the ordinary pathological processes, many rare specimens, some of historical interest. It draws largely for its supply from the General Infirmary, as well as from other institutions in the City. A collection of microscope sections from specimens in the Museum is available for the use of students on application.

A complete type collection of Materia Medica specimens is also placed here for the convenience of students.

The Anatomy Museum and Bone Room adjoins the Dissecting Room, and has been fitted up, under the direction of the Professor of Anatomy, with a valuable collection of specimens specially arranged for study, which are also used in illustration of the lectures on Anatomy. Amongst them are a complete set of bones marked with the muscular attachments, and mounted in revolving cases; and several series of wax models, illustrating the development of the feetus.

A collection of OLD INSTRUMENTS, Surgical, Obstetrical, and Medical, of disused type or of historical value, is being formed. Many of considerable interest have already been obtained, and additional contributions will be gladly received by the Hon. Curator, Professor Wright.

# DEGREES IN MEDICINE AND SURGERY

The Degrees in Medicine and Surgery shall be:

Bachelor of Medicine and Bachelor of Surgery Ordinance, (M.B. and Ch.B.)

Doctor of Medicine (M.D.)

Master of Surgery (Ch. M.).

# Degrees of Bachelor of Medicine and Bachelor of Surgery

Candidates for the degrees of Bachelor of Medicine and of Surgery are required to present certificates showing that they will have attained the age of twenty-one years on. the day of graduation, and that they have attended courses of instruction approved by the University extending over not less than five years, two of such years at least having been passed in the University, at least one year being subsequent to the date of passing the First examination.

During the first four years, a year of medical study must Regulations. include attendance upon at least two of the prescribed courses of lectures or laboratory work, or one such course and hospital practice, in each term, if that year is to count as part of the degree course. In the fifth year clinical work will suffice. The attendance must be given at the University or at a college, medical school, or hospital recognised by the University.

Candidates for the degrees of Bachelor of Medicine Ordinance. and of Surgery are required to satisfy the Examiners in the several subjects of the following examinations, entitled respectively:

The Matriculation examination, or such other examination as may have been recognised by the Joint Matriculation Board of the Universities of Manchester, Liverpool, Leeds. and Sheffield in its stead; the First examination; the Second examination; the Final examination.

<sup>1</sup> For particulars of the Matriculation examination, see page 307

egulations

Except as provided below, candidates must present themselves and pass in all the subjects of any part of an examination at the same examination. But candidates who have failed (a) in Chemistry or Physics at the First examination for the degrees of M.B. and Ch.B., or (b) in Anatomy or Physiology at the Second examination for the degrees of M.B. and Ch.B., or (c) in any subject of Part I of the Final examination for the degrees of M.B. and Ch.B., or (d) in any subject of Part II of the Final examination for the degrees of M.B. and Ch.B. may be exempted from reexamination in such part of the examination as the combined Examination Committee may determine. Provided that this exemption shall not be allowed except at the examination next following that at which such candidates have failed when presenting all the subjects.

#### First Examination1

dinance 'The First examination shall consist of two parts:

PART I. Physics Chemistry.

PART II. Biology.

Candidates, before presenting themselves for the First examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the Matriculation examination.

Candidates who have passed the Intermediate examination for the degree of Bachelor of Science in Chemistry, Physics, and Biology will, on payment of the required additional fee, be regarded as having passed the First examination for the degrees of Bachelor of Medicine and Bachelor of Surgery.

The names of candidates who have satisfied the Examiners in either part of the First examination shall be published in alphabetical order.

gulations

Candidates for the First examination are required to furnish certificates of having attended during at least one year

This examination is held twice in each calendar year. In 1908, it will begin on Wednesday, June 10, and Tuesday, September 15. The latest days for entry will be Monday, March 2 and Monday, August 31, respectively.

the following courses of instruction either in the University or in an institution recognised for this purpose by the University:

- 1. Chemistry, Inorganic and Organic: lectures and laboratory work.
- 2. Biology (Zoology and Botany): lectures and laboratory work.
- 3. Physics: lectures and laboratory work.

The examination will include laboratory work in the three subjects. Candidates may pass in each part separately.

#### Second Examination

The Second examination shall consist of two parts: Ordinance,

PART I. Anatomy Physiology.

PART II. Materia Medica Pharmacy.

Candidates, before presenting themselves for the Second examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the First examination.

The names of candidates who have satisfied the Examiners in either part of the Second examination shall be published in alphabetical order.

Candidates for the Second examination are required to have Regulations, passed the First examination, and to have attended complete courses of instruction, approved by the University, in Anatomy and in Physiology during four terms; in Materia Medica and in Pharmacy for one term. The certificates must shew (1) that dissection has been practised during five terms at least; (2) that laboratory instruction, approved by the University, has been received in Physiology; (3) that practical instruction, approved by the University, has been received in Materia Medica and Pharmacy.

<sup>1</sup> This evamination is held twice in each calendar year. In 1908 it will begin on Monday, Match 23, and Thursday, July 2. Notice must be given and fees paid fourteen days before these dates.

# Subjects of examination

PART I.

Anatomy. Candidates may, at the discretion of the Examiners, be required to perform actual dissection.

Physiology includes laboratory work in Physiological Chemistry, Histology, and Experimental work.

PART II.

Materia Medica and Pharmacy. Candidates will be required to recognise drugs, and to compound medicines.

Candidates may pass in each part separately.

Candidates who fail to satisfy the Examiners in Part I or Part II must before being readmitted to examination produce evidence of having pursued such further study as may have been required by the Examiners.

#### Final Examination1

Ordinance.

The Final examination shall consist of two parts:

PART I. Pathology and Bacteriology Forensic Medicine Public Health.

PART II. Medicine

Surgery

Obstetrics and Gynaecology Pharmacology and Therapeutics

Candidates, before presenting themselves for the first part or the second part of the Final examination, are required to have passed the Second examination, and to furnish certificates of having attended courses of instruction, in accordance with the Regulations of the University.

The names of candidates who have satisfied the Examiners in the first part of the Final examination shall be published in alphabetical order.

The names of candidates who have satisfied the Examiners in all the subjects of the Final examination, and are recommended for degrees, shall be published as follows:

- 1. Those awarded First Class Honours
- 2. Those awarded Second Class Honours
- 3. Those who have satisfied the Examiners.

The names shall be in alphabetical order in each case.

<sup>1</sup> This examination is held twice in each calendar year. During the present session it will begin as follows: Parts I and II on Wednesday, December 11, 1907, and on Thursday, July 2, 1908. Notice m be given and fees paid fourteen days before these dates.

# Certificates of attendance

Candidates, before presenting themselves for the first Regulations. part of the Final examination, are required to have passed the Second examination, and to have completed the twelfth term of medical study. Candidates, before presenting themselves for the second part of the Final examination, are required to have passed the First part of the Final examination and to have completed the fifth year of medical study. Candidates must furnish certificates of having attended courses of instruction, approved by the University, in the University, or in a medical school recognised for this purpose by the University, in the subjects in which they offer themselves for examination.

Candidates are required to furnish certificates as follows:

- A. Of having attended courses of instruction, approved by the University, in the University or in a medical school or hospital recognised for this purpose by the University, in the following subjects:
  - 1. Pharmacology and Therapeutics, one term.
  - Pathology and Bacteriology, three terms.
     The certificate in Pathology and Bacteriology must in all cases testify that the candidate has attended a course of laboratory instruction in these subjects, approved by the University.
  - 3. Forensic Medicine, one term.

    The certificate in Forensic Medicine must in all cases testify that the candidate has attended a course of practica instruction in Toxicology, approved by the University.
  - 4. Public Health, one term.
  - 5. Obstetrics and Gynæcology, two terms.

The certificate in Obstetrics and Gyn.ecology must in all cases testify that the candidate has attended a course of practical instruction approved by the University, in the use of obstetrical and gynecological instruments.

- Systematic Surgery, two terms; Practical Surgery, two terms.
- 7. Systematic Medicine, four terms.

The certificate in Medicine must in all cases testify that the candidate has attended, during one term in each case, courses of instruction approved by the University in (a) Mental Diseases; (b) Infectious Diseases.

B. In respect of Hospital work.

I. In Medicine and Surgery, of having attended the medical and surgical practice of a hospital or hospitals, approved by the University, during at least three years, of which years two at least must be subsequent to the date of passing the Second examination, except when exemption has been granted by the Senate, after report from the Board of the Faculty of Medicine. Clinical Medicine, two years of clinical lectures. Clinical Surgery, two years of clinical lectures.

 In Pathology and Morbid Anatomy, of having attended during at least twelve months demonstrations in the post-mortem room of a hospital,

including practical instruction.

3. In Obstetrics, (a) of having attended during not less than one month the indoor practice of a lying-in hospital or the lying-in wards of a general bospital approved by the University, and (b) of having personally conducted not less than twenty cases of labour, subsequently to having acted as surgical dresser and clinical clerk.

The certificate must in all cases (a) testify that such attendance has been given under the direct supervision of a medical officer of the hospital, and (b) regarding the personal conduct of cases of labour, be signed by a member of the staff of a hospital.

pital or a maternity charity.

4. In Gynæcology, of having, during at least three months, received in either a general or a special hospital, approved by the University, such clinical instruction in the diseases peculiar to women as shall be approved by the University.

5. Of having received clinical instruction in diseases or

the eye, ear, throat, and skin.

6. Of having acquired proficiency in vaccination.

7. Of having acted as a surgical dresser for six months, as a clinical clerk for six months, and as a clerk for three months in the post-mortem room of a hospital recognised by the University.

<sup>1</sup> This regulation came into forc in October, 1906. Students who entered before that date are permitted to come under the regulation published in the Calendar for 1905-6.

# Detailed subjects of examination

PHARMACOLOGY AND THERAPEUTICS.

PATHOLOGY AND BACTERIOLOGY.

Candidates will be examined practically on Bacteriology, Pathological Anatomy, Histology, and Chemistry.

FORENSIC MEDICINE AND TOXICOLOGY AND PUBLIC HEALTH.

Candidates will be required to conduct a qualitative analysis of poisonous substances selected from the following list:

CLASS I. (In simple solution) Carbohe Acid, Alcohol, Chloroform, Chloral Hydrate, Strychnine, Brucine, Morphine, Meconic Acid.

CLASS II. (In combination with various organic substances) Mineral Acids, Oxalic Acid, Hydrocyanic Acid and the Cyanides, Caustic Alkalies, Phosphorus, Compounds of arsenic, antimony, mercury, lead, barium, zinc, copper, and silver.

They may also be required to determine the character of stains and stained fabrics, microscopically and chemically, and to recognise poisonous articles of the materia medica.

OBSTETRICS AND GYN.FCOLOGY.

Candidates will be required to show their practical acquaintance with obstetrical and gynæcological manipulations and instruments by the use of the phantom or otherwise, and will also be examined on museum preparations.

SURGERY: Systematic, Clinical, and Practical.

Candidates will be examined on the use of surgical instruments and apparatus, and on museum preparations; they will also be required to perform operations on the dead body.

Candidates, in order to pass, must satisfy the Examiners in the

clinical part of the examination.

MEDICINE: SYSTEMATIC AND CLINICAL, INCLUDING MENTAL DISEASES AND DISEASES OF CHILDREN.

Candidates, in order to pass, must satisfy the Examiners in the clinical part of the examination.

In determining the award of Honours account will be taken of the results of the Second examination.

Candidates who fail to satisfy the Examiners in any subject of the examination must, before being re-admitted to examination, produce evidence of having pursued such further study as may have been required by the examiners.

# Degree of Doctor of Medicine

No candidate shall be admitted to the degree of Doctor of Ordinance Medicine unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.

Candidates for the degree of Doctor of Medicine are required to present a dissertation, and, if the dissertation be accepted, to pass an examination. The dissertation, of which the subject must previously have received the approval of the Board of the Faculty of Medicine, must embody the results of personal observations or original research, either in some department of medicine or of some science directly related to medicine, provided always that original work, published in scientific journals or in the Proceedings of learned societies, or separately, shall be admissible in lieu of or in addition to a dissertation specially written for the Candidates will be required to write a short extempore essay on some topic connected with medicine, and to answer questions on the history of medicine. will also be examined orally on the dissertation or other work submitted. Any candidate may be exempted from a part or the whole of the examination if the Board of the Faculty so decide. No candidate will be admitted to the degree unless his application, after report from the Board of the Faculty of Medicine, shall have been accepted by the Senate.

The names of candidates who have been approved for the degree of Doctor of Medicine shall be published in alphabetical order.

Regulation.

Candidates for the degree of Doctor of Medicine are required to furnish three copies (printed or type-written) of the dissertation or published work which they desire to submit, together with any drawings or specimens which may be necessary for their illustration. These copies shall be sent in to the Registrar and will be retained by the University.

# Degree of Master of Surgery

Ordinance.

No candidate shall be admitted to the degree of Master of Surgery unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.

Every candidate, before presenting himself for the examination for the degree of Master of Surgery, is required to have graduated as Bachelor of Medicine and Bachelor of Surgery, and to furnish certificates of attendance in accordance with the Regulations of the University.

# Subjects of Examination

Surgical Anatomy Surgery Operative Surgery Clinical Surgery Ophthalmology Pathology and Bacteriology.

The names of candidates who have satisfied the Examiners Regulations

shall be published in alphabetical order.

Candidates, before admission to the examination for the degree of Master of Surgery, are required to furnish certificates which shall be deemed satisfactory by the University that they, since taking the degree of Bachelor of Medicine and of Surgery, have held, for not less than six months, a Surgical appointment in a public hospital or other public institution affording full opportunity for the study of Practical Surgery.

Candidates proposing to present themselves for this examination are required to give notice, in writing, to the Registrar and pay the fee on or before June 1st.

Candidates for the degree of Master of Surgery are

also required to furnish certificates:

1. Of having attended a special course of instruction on Operative Surgery, approved by the University, and of having personally practised the principal surgical operations on the dead body.

2. Of having attended a systematic course of instruction, including practical work, approved by the University,

on Bacteriology.

 Of having attended a course on Ophthalmology, and of having received instruction in Ophthalmic Surgery approved by the University.

# DIPLOMA IN PUBLIC HEALTH

Regulations. The examination is held twice in each year, in July and December, under the following

#### Regulations.

1. The examination is in two parts, and is written, oral, and practical.

2. Candidates, before entering for the first part of the examination, must have held for not less than twelve months a registrable qualification in Medicine, Surgery, and Midwifery, and must present satisfactory certificates,

 i. Of having attended an approved course of instruction in Public Health in the University, or in a college or medical school recognised for this

purpose by the University;

ii. Of having attended, after obtaining a registrable qualification, during at least six months practical instruction in laboratories approved by the University, the courses including Chemistry as applied to Public Health, Bacteriology, and the Pathology of those diseases of animals which are communicable from animals to man.

Candidates before entering the second part of the examination must present certificates,

- iii. Of having, after obtaining a registrable qualification, attended during not less than three months the clinical and administrative practice of a hospital for infectious diseases approved by the University.
- iv. Of having, after obtaining a registrable qualification, during six months (of which at least three months shall be distinct and separate from the period of laboratory instruction required under ii), been diligently engaged in acquiring a knowledge of the duties, routine and special, of Public Health administration under the supervision of (a) the medical officer of health of a county, or of a single sanitary district having a population not less than 50,000, or (b) a medical

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<sup>1</sup> In the current session it will begin on Wednesday, December 11, 1907, and on Monday, July 6, 1908.

officer of health devoting his whole time to Public Health work, or (c) a medical officer of health who is also a teacher in the Department of Public Health of a recognised medical school, or (d) a sanitary staff officer of the Royal Army Medical Corps having charge of an Army Corps, district or command, recognised for the purpose by the General Medical Council, or of having attended during three months as required above, and during three months after obtaining a registrable qualification, having attended a course or courses of instruction, approved by the University, in subjects bearing on Public Health Administration.

- 3. Candidates may present themselves for Parts I and II separately or at the same time, provided that no candidate be allowed to pass in Part II unless he has already passed in Part I. No candidate's name will be published until he has satisfied the Examiners in both parts of the examination.
- 4. The fee for each part is  $\mathcal{L}_5$  5s., and must be paid at least fourteen days before the commencement of the examination. For any subsequent examination in the same part the fee will be  $\mathcal{L}_3$  3s.

Every candidate who has passed both parts of the examination, and who is legally registered, will receive a diploma in Public Health.

Medical Practitioners registered or entitled to be registered on or before January 1, 1890, may be exempted from producing the above required certificates of study.

#### Subjects of Examination

#### Part 1

I. CHEMISTRY AS APPLIED TO PUBLIC HEALTH:

Chemistry, with special reference to the examination of air and water. Methods of qualitative and quantitative analysis.

2. Physics as applied to Public Health:

Elements of Heat, with special reference to warming, ventilation, and meteorology. Meteorological instruments and their use.

#### 3. ÆTIOLOGY OF DISEASE:

Pathology of epidemic and endemic diseases, including diseases of animals communicable to man. Influence of unwholesome food, air, water, occupation, dwelling, climate, season, soil.

#### 4. PRACTICAL PATHOLOGY AND BACTERIOLOGY:

Practical Bacteriology, detection and cultivation of vegetable parasites, bacteriological analysis of air and water. Recognition of parasites and of the lesions which they produce in man. Recognition of diseased meat.

#### 5. MICROSCOPY AS APPLIED TO PUBLIC HEALTH:

Foods, their adulterations, contaminations, and parasites. Air and water, their microscopical impurities.

#### Part II

#### I. ENGINEERING AS APPLIED TO PUBLIC HEALTH:

Water supply. Drainage, sewerage, and disposal of refuse. Construction of dwellings, schools, hospitals, including their warming and ventilation. Geological data referring to the above. Interpretation of plans.

#### 2. SANITARY LAW AND ADMINISTRATION:

Domestic and general sanuation of houses, villages, and towns. Regulation of offensive, dangerous, or unhealthy trades and occupations. The prevention and control of epidemic disease by isolation, disinfection, vaccination, and other methods. Statutes and bye-laws relating to Public Health. The control of the food supply.

#### 3. VITAL STATISTICS.

#### 4. SANITARY REPORTING:

The candidate will be required to visit and report upon the sanitary condition of some locality assigned to him by the Examiners.

#### Order of Examination

#### Part 1

The examination will include:

- A two hours' written examination on Chemistry and Physics as applied to Public Health.
- 2. A four hours' practical and oral examination on Chemistry and Physics as applied to Public Health.
- 3. A three hours' written examination on the Ætiology of Disease.
- 4. A four hours' practical and oral examination on bacteriology, the pathology of infectious diseases, diseased meat, and the use of the microscope as applied to the examination of food, air, and water.

#### Part 11

The examination will include:

- A three hours' written and oral examination on Engineering as applied to Public Health.
- 2. A three hours' written examination on Sanitary Law and Administration, and on Vital Statistics.
- 3. Sanitary reporting.
- 4. Oral examination on the above subjects

# DEGREES AND DIPLOMA IN 'DENTAL SURGERY

Ordinance. T'

The degrees in Dental Surgery shall be:

Bachelor of Dental Surgery (B.Ch.D.)

Master of Dental Surgery (M.Ch.D.)

# Degree of Bachelor of Dental Surgery

All candidates for the degree of Bachelor of Dental Surgery shall be required to have passed the Matriculation examination, to have pursued thereafter approved courses of study for not less than five academic years, two of such years at least having been passed in the University subsequently to the date of passing Parts I and II of the First examination, and to have completed such period of pupilage or hospital attendance, or both, as may be prescribed by the Regulations of the University No candidate shall be admitted to the degree who has not attained the age of twenty-one years on the day of graduation.

All candidates shall be required to have passed the following examination: The First examination, the Second examination, the Final examination.

Each examination shall include practical work in the subjects offered.

All candidates shall be required, before presenting themselves for examination, to furnish to the Registrar certificates testifying that they have attended the prescribed courses of instruction in accordance with the Regulations of the University in each of the subjects which they offer, and that they have fulfilled the other requirements of the Ordinance and Regulations in respect of such examination.

Regulations.

In each examination the names of candidates who have satisfied the Examiners shall be published in alphabetical order.

#### First Examination

Ordinance The First examination shall consist of three parts:

PART I. Physics Chemistry. PART II. Biology. PART III. Dental Mechanics Dental Metallurgy.

Candidates shall be allowed to pass in each part separately.

Candidates who have passed the Intermediate examination for the degree of Bachelor of Science, and have in that examination satisfied the Examiners in Chemistry, in Physics, or in Biology, shall, on payment of the difference between the fees required for the two examinations, be regarded as having satisfied the requirements of Parts I and II of the First examination for the degree of Bachelor of Dental Surgery, in those subjects in which they have passed.

Candidates shall be required, before presenting themselves for Parts I and II of this examination, to have passed the Matriculation examination, and to have attended courses of instruction in accordance with the Regulations of the University.

Candidates shall be required, before presenting themselves for Part III of this examination, to have completed two years from Matriculation, and to have attended courses of instruction in accordance with the Regulations of the University.

Candidates for Part I or Part II of the First examination Regulations. shall be required to have attended during at least one year, either in the University or in an institution recognised for this purpose by the University, courses of instruction, including laboratory work, in the subjects of the examination, namely:

Part I. Physics: lectures and laboratory work Chemistry, Inorganic and Organic: lectures and laboratory work.

Part II. Biology (Zoology and Botany): lectures and laboratory work.

Every candidate for Part III of the First examination shall be required to have spent two years in the Prosthetic Department of a recognised Dental or General Hospital, or in pupilage to a qualified and registered dental surgeon, and to have attended, during at least one year, courses of lectures

and practical instruction approved by the University, in the subjects of the examination, namely: Dental Mechanics (including electrical appliances used in Dentistry): lectures and laboratory work. Dental Metallurgy: lectures and laboratory work

The First examination shall be held twice in each calendar

year.

Second Examination

Ordinance.

The subjects of the Second examination shall be:

Anatomy Physiology Dental Anatomy a

Dental Anatomy and Physiology

Dental Materia Medica.

Candidates shall be required, before presenting themselves for the Second examination, to have passed the First examination not less than one year previously, and to have attended courses of instruction in accordance with the Regulations of the University.

Regulations.

Candidates for the Second examination shall be required to have attended courses of instruction approved by the University, as follows: Anatomy lectures, two terms; Practical Anatomy and demonstrations, including the dissection of the head and neck, three terms; Dental Anatomy and Physiology, one term; Dental Microscopy, one term; Physiology lectures, two terms; Physiological Laboratory, one term; Practical Histology, one term; Dental Materia Medica, one term.

The Second examination shall be held twice in each calendar year.

Final Examination.

Ordinance.

The subjects of the Final examination shall be:

Dental Surgery

Dental Pathology and Bacteriology

Operative Dental Surgery Medicine and Surgery.

Candidates shall be required, before presenting themselves for the Final examination, to have passed the First examination not less than two years previously, to have passed the Second examination not less than six months previously, and to have attended courses of instruction in accordance with the Regulations of the University Candidates for the Final examination shall be required to Regulations. have attended courses of study, approved by the University, as follows: Surgery lectures, two terms; Special Surgery of the Mouth, six lectures; Medicine lectures, two terms; Dental Surgery and Pathology lectures, two terms; Operative Dental Surgery lectures, one term; Demonstrations on Anæsthetics, two terms; Dental Bacteriology, lectures and practical work, one term.

Candidates shall be required to present certificates of two years Medical, Surgical and Dental practice at hospitals recognised by the University. These certificates must show that practical instruction has been received in Medicine, Surgery, and the administration of Anæsthetics. Every candidate shall be required to have acted as clerk and as dresser, for three months in each case, in a hospital recognised by the University.

The Final examination shall be held twice in each calendar year.

# Diploma in Dental Surgery (L.D.S.)

Candidates for the diploma in Dental Surgery (L.D.S.) are Regulations. required to present certificates showing that they have attained the age of twenty-one years, that they have attended courses of instruction, approved by the University, extending over not less than four years, and that they have completed a pupilage of three years, two of such years at least having been taken before the First Professional examination.

Candidates are required to satisfy the Examiners in the several subjects of the following examinations:

A Preliminary examination in Arts; a Preliminary examination in Science; the First Professional examination; and the Final examination.

# Preliminary Examination in Arts

The requirements of the Preliminary examination in Arts shall be fulfilled by passing an examination recognised for this purpose by the General Medical Council.

#### Preliminary Examination in Science

The Preliminary examination in Science shall be held twice yearly.<sup>1</sup> Its subjects shall be:

Chemistry Physics.

Candidates are required to give evidence of having attended courses of instruction recognised by the University as follows: Chemistry, lectures and laboratory, two terms; Physics, lectures and laboratory, two terms. This instruction may be taken at any school or technical college recognised by the University.

#### First Professional Examination

The subjects of the First Professional examination are Dental Metallurgy

Dental Mechanics.

Candidates are required to have passed the Preliminary examination in Science not less than six months previously, and to have attended courses of instruction, recognised by the University, in the subjects of the examination, according to the syllabus of the Conjoint Board. They are also required to give evidence of having spent two years in pupilage.

#### Final Examination

The Final examination shall consist of two parts:

PART I. Anatomy
Physiology
Dental Anatomy and Physiology
Dental Materia Medica.

PART II. Surgery

Dental Surgery, Pathology and Bacteriology Operative Dental Surgery (Practical).

Candidates must pass in Part I before being examined in Part II, and may pass the two parts separately. The examination in Part II shall be held immediately after that in Part I, so that the two parts may be passed, if desired, in immediate succession.

<sup>1</sup> This examination is held twice in each calendar year. In 1908, it will begin on Wednesday, June 10, and Tuesday September 15. The latest days for entry will be Monday, March 2, and Monday, August 31, respectively.

Candidates, before presenting themselves for examination in Part I, are required to have passed the First Professional examination not less than one year previously, and to have attended courses of instruction recognised by the University, as follows: Anatomy lectures, two terms; Practical Anatomy, three terms; Physiology lectures, two terms; Practical Physiology, one term; Dental Anatomy and Physiology lectures, one term; Dental Microscopy, one term; Surgery lectures, two terms; Special Surgery of the Mouth, six lectures; Dental Materia Medica, one term.

Candidates before presenting themselves for examination in Part II, must have passed in Part I, and must produce evidence of having (1) completed four years from the beginning of their pupilage; (2) spent three years in pupilage; (3) completed two years' Medical and Surgical practice at hospitals recognised by the University: (4) completed two years' Dental Hospital practice; (5) attended courses of instruction recognised by the University, as follows: Medicine, one term; Dental Surgery and Pathology lectures, one term; Dental Surgery lectures, one term; Operative Dental Surgery lectures, one term; Six Special Anæsthetic demonstrations. The certificates of Medical and Surgical practice must show that practical instruction has been received in Medicine and Surgery, and in the administration of Anæsthetics.

#### Fees for Dental Classes

The fees for lectures and practical work in Dentistry are as follows: Dental Surgery and Pathology, 6 guineas; Operative Dental Surgery, 4 guineas; Dental Anatomy and Physiology, 6 guineas; Dental Mechanics, lectures 3 guineas and practical work, 3 guineas; Dental Metallurgy, lectures 3 guineas and practical work 3 guineas; Dental Microscopy, 3 guineas; Dental Bacteriology, 2 guineas; Dental Materia Medica, 2 guineas.

#### Composition Fees

For the degree in Dental Surgery the composition fee covering all the requisite courses is 65 guineas, payable in two instalments of 45 and 20 guineas respectively, or £65 if paid in one sum.

For the diploma in Dental Surgery the composition fee covering all the requisite courses is 60 guineas, payable in two instalments of 40 and 20 guineas respectively or £,60 if paid in one sum.

#### Fees for Dental Examinations

For the First examination for the degree of B.Ch.D.,  $\pounds_5$ ; and for each subsequent examination,  $\pounds_2$ .

For the Second examination for the degree of B.Ch.D.,

£4; and for each subsequent examination, £2.

For the Final examination for the degree of B.Ch.D., £4;

and for each subsequent examination,  $\pm$ , 2.

For the Preliminary examination in Science for the diploma of L.D.S.,  $\mathcal{L}_2$ ; and for each subsequent examination,  $\mathcal{L}_1$ .

For the First Professional examination for the diploma of L.D.S.,  $\mathcal{L}_2$ ; and for each subsequent examination,  $\mathcal{L}_1$ .

For Part I of the Final examination for the diploma of L.D.S., £3; and for each subsequent examination £1.

For Part II of the Final examination for the diploma of L.D.S., £3; and for each subsequent examination, £1.

#### Degree Fees

For conferment of degree or diploma, £5.

#### Courses in Medicine

## I. COURSES HELD IN THE UNIVERSITY BUILDINGS, COLLEGE ROAD

#### **PHYSICS**

Professor Stroud Mr. Allen Mr. Shorter Mr. Carlton Mr. Sykes

The course designed to meet the wants of candidates for he First M.B. examination of the University of Leeds or the Preliminary Scientific (M.B.) examination of the University of London or the examination of the Conjoint Board, will consist of two experimental lectures on Wednesdays and Fridays, at 4 p.m., and one calculation class, on Thursdays, at 9.30 a.m., weekly throughout the session.

Fee, £.3 13s. 6d.

The Physical laboratory is open daily. A special course of Practical Physics for medical students will be held on Saturday mornings, from 9.30 a.m. to 12.30 p.m., throughout the session. Fee, £3 3s.

For further information see page 238.

#### **CHEMISTRY**

Professor Smithells Professor Cohen
Dr. Dawson Mr. Lowson
Mr. Whiteley Mr. Perkins Mr. Marshall

#### I. General Course

Part I. Inorganic Chemistry: during the first and second terms. Mondays, Wednesdays, and Fridays, at 11.30 a.m. Tutorial class on Wednesdays, at 2 p.m.

Part II. Organic Chemistry: during the third term. Mondays, Wednesdays, and Fridays, at 11.30 a.m. Tutorial class on Wednesdays at 2 p.m. and Thursdays at 10.30 a.m.

Fee for the whole course (including tutorial class) £4 48.; for part I, £3 138. 6d.; for part II, £1 18

(See page 241.)

#### II. Practical Chemistry

Fridays, 2 to 4 p.m., throughout the session. Tuesdays and Thursdays, 2 to 5 p.m., in the first and second terms, and Tuesdays, 9.30 a m. to 12.30 p.m., in the third term. (See page 243.)

#### III. Organic Chemistry

Tuesdays, Thursdays, and Saturdays, at 12 noon, throughout the session. Fee, £3 13s. 6d.

(See page 2.12.)

#### IV. Practical Organic Chemistry

Tuesdays and Thursdays, from 10 a.m. to 12 noon

during the third term. Fee, £2 2s.

N.B. Courses III and IV are suitable for students preparing for the Intermediate M.B. examination of the University of London.

#### V. Sanitary Chemistry

For practitioners who are preparing for a diploma or degree in Public Health.

Tuesdays and Thursdays, from 2 to 5 p.m., during the

third term. (See page 2.44.)

Fee, £5 58.

N.B. For students who wish to take additional practical work of whatever kind, the Chemical laboratories are open daily from October to June inclusive

#### **BIOLOGY**

Professors Blackman and Garstang.
Dr. Smith Mr. Taylor Mr. Walker
Mr. Unwin

For full details of the various courses see under the Departments of Zoology and Botany (see pages 246, 250).

1. For students preparing for medical diplomas: Course

II, Medical Biology, page 248.

Each student will be required to provide himself with a microscope (suitable also for his subsequent studies, see pages 247, 249), a dissecting case, a biological drawing book, and some simple instruments for microscopic work. The Professors will be glad to advise students on these points.

2. Students preparing for the First M.B. examination of the University of Leeds, or the Preliminary Scientific (M.B.) of London, should take the courses in Zoology and Botany, which form part of a special course qualifying for these examinations. See Course I, Elementary Biology, page 246, 250.

3. Students preparing for the Fellowship examination of the College of Surgeons of England may take a three months' course of Zoology in the first term, including not less than four hours' practical work per week.

Fee, £3 3s.

4. Where Botany is required for any of the medical examinations, the ordinary course (Course I, page 250) should be taken. Fee, £5 5s

## II. COURSES HELD IN THE SCHOOL OF MEDICINE

#### **ANATOMY**

Professor Griffith Mr. Jamieson Mr. Teale Mr. Dobson Mr. Gough

#### I. Descriptive Anatomy

Monday, Wednesday, Thursday, and Saturday at 9.15 a.m., during the first and second terms.

The systematic course of lectures is, for convenience of teaching, divided into two parts. Students are required to attend both parts before they are entitled to signature for one full course of Anatomy.

The first part is intended for first year's students, and treats especially of osteology and the anatomy of the joints and limbs.

The second part deals with the anatomy of the head and neck, thorax and abdomen; and particular attention is paid to the nervous system and the organs of special sense.

Fee for each part, £5 5s.

Systematic tutorial classes are held in connection with the October course.

#### II. Practical Anatomy

The dissecting room is open daily from 9 a.m. till 5 p.m., (Saturday until 12.30 p.m.) throughout the session, the work of the students being constantly supervised by the Demonstrators, who attend daily. Tutorial classes and examinations are held daily on recent dissections and on preparations from the anatomical museum; and special

instruction is given to all students who are about to present themselves for examination, particularly to those preparing for the higher examinations, such as University degrees and the Primary F.R.C.S., Eng.

Only those students are admitted into the Dissecting-room who have entered for the Anatomy course, or who have paid the fee for the use of the room.

Fees	£	٥.	d.
Use of Dissecting-room, with tutorial instruction, during attendance on the anatomical course,			
covering two sessions	5	5	0
Use of Dissecting-room, with tutorial instruction,			
for every three months or portion of three months during the two years subsequent to the			
above period	2	2	0
Use of Dissecting-room, with tutorial instruction	_	_	_
under all other circumstances, for three			
months, £3 3s.; for six months	5	5	0

#### III. Applied Anatomy

The class meets on Wednesday and Saturday at 9 a.m., during the third term, in the Anatomy Theatre. It is intended for senior students and for qualified practitioners. It deals with the application of anatomical facts to medicine and surgery, and is fully illustrated by dissections, diagrams, and the living model.

Fee, £,2 28.

#### PHYSIOLOGY AND HISTOLOGY

Professor Birch

Mr. CLARK

#### I. General Course

This course of lectures deals with Physiology generally, and is illustrated by experiments. Monday, Wednesday, Thursday, Friday, at 2 p.m., during the first and second terms.

Fee, £8 8s.

#### II. Advanced Course

About 18 lectures, on Tuesday in the first and second terms, to be attended by students in the session succeeding that in which they have attended Course I.

Fee, £, 2 2s.

NOTE: The complete "Course" consists of Courses I and II.

#### III. Microscopical Demonstrations

are held at 11 a.m. every Saturday throughout the session, and are open to all students attending courses of Physiology.

#### IV. Practical Physiology

This course is divided into two parts. Students are required to attend both parts before they are entitled to signature for a course of Practical Physiology.

Part I. Practical Histology: During the third term, on Monday, Wednesday, and Iriday, for about two hours in the morning.

Students are required to provide themselves with the following: (1) A microscope of good construction, provided with 1 inch and  $\frac{1}{6}$  inch objectives and a condenser, which should be submitted to the approval of the Professor before the commencement of the class as no one will be permitted to work with an inefficient instrument. The Professor will be glad to assist students in the choice of an instrument. (2) Some accessories (such as scissors, forceps, needles, slides and covers, etc.), a list of which can be had on application.

Part II extends through the first and second terms.

This covers the work in chemical and experimental Physiology required by the University.

Fees for part I, £6 6s.; for part II, £4 4s.

# V. Physiological Demonstrations and Catechetical Classes are held during the session at such times as may be found convenient.

#### VI. Recapitulatory Class

A short laboratory course for students who desire to recapitulate their laboratory work. Classes will be formed in the second and third terms, and will meet twice a week, at times to be arranged.

Fee, £2 28.

#### The Physiological Laboratories

are open daily during University hours for research work; the fees are on the same scale as in the other laboratories of the University. (See page 120.)

#### PATHOLOGY AND BACTERIOLOGY

Professor Grunbaum

Mr. Scott Dr. Coplans Mr. Collinson

#### I. General Pathology

Monday, at 4 p.m., and Tuesday and Thursday, at 12 noon, in the third term.

Fee, £4 4s.

#### II. Practical Pathology and Bacteriology

Tuesday, Wednesday, and Friday, from 12 noon to 1.30 p.m. during the first and second terms. In this class practical instruction with intercalated lectures is given in Morbid Histology, Bacteriology and Pathological Chemistry. Students will make and mount preparations for microscopical examination and will make bacteriological investigations required for diagnosis.

Each student must provide himself with a good microscope, having an oil immersion lens and a condenser, and with the usual accessories

Fee, £5 5s.

# III. Tutorial Classes in Surgical and in General Pathology will be held by Mr. Collinson and by Mr. Scott, as may be arranged from time to time.

#### IV. Clinical Pathology

A postgraduate practical class in this subject will be held during the first term, on Wednesday at 4 p.m.

Fee, £3 3s.

#### V. Bacteriology for the Diploma in Public Health

This course will be held in the second term. It will include practical instruction in the pathology of those diseases of animals which are communicable to man. (See page 347.)

Fee, £5 5s.

#### The Laboratories of Pathology and Bacteriology

are open daily for research work. The fees are on the same scale as in other laboratories of the University. (See page 120.)

In this department the various bacteriological and pathological investigations required by county and municipal authorities and by private practitioners are carried out.

# PRINCIPLES AND PRACTICE OF MEDICINE

Professor Barrs Dr. Watson

Monday, Wednesday, and Friday, at 9 a.m., during the first and second terms.

The complete course extends over two years. It is divided into the following sections:

Diseases of the nervous system.

Diseases of the organs of circulation.

Diseases of the organs of respiration.

Diseases of the digestive and blood-forming organs.

Diseases of the kidneys.

Infectious and contagious diseases, fevers, diphtheria, syphilis, hydrophobia, &c.

Parasites.

Diseases of the skin.

Diseases of special trades.

Fee, £,6 6s.

#### SYSTEMATIC SURGERY

Professor Littlewood Mr. Coupland

Tuesday, Thursday, and Saturday, at 9 a.m., during the first and second terms.

The course comprises the following subjects:

The process of repair.

Inflammation; suppuration; ulceration.

The constitutional effects of injury; shock, fever, delirium, &c.

Injuries and wounds, including special injuries of head, spine, throat, chest, and abdomen.

Special fractures and dislocations.

Surgical diseases; gangrene; erysipelas; septicæmia; pyæmia; tetanus.

Tumours; tubercle; venereal diseases.

Surgical diseases of special parts:—skin, lymphatic system, vascular system, nervous system, bones, joints, &c.

Deformities. Plastic and orthopædic surgery.

Abdominal surgery, including hernia.

Diseases of the urinary and generative organs.

Fee, £6 6s.

#### PRACTICAL SURGERY

Mr. KNAGGS

Tuesday and Thursday at 4 p.m., during the first and second terms.

In this are comprised:

1. A course of bandaging and application of splints and other appliances.

2. Demonstrations and descriptions of instruments and

surgical appliances used in diagnosis or treatment.

3. The application of anatomical knowledge to the investigation of surgical diseases.

4. Methods of reducing dislocations, setting fractures and

dressing wounds.

5. A course of operations performed on the dead body before the class, the members of which will be required to operate.

Fee, £,4 4s.

#### OPERATIVE SURGERY

Mr. Thompson

During the third term classes will be formed for the performance of operations on the dead body, under the superintendence of the lecturer. As all the important operations will be done by the students, every opportunity will be given for gaining practical experience in this branch of surgery. Fee, £12 12s. divided in equal shares among a class of not more than four students.

#### **OBSTETRICS**

Professor Wright

Dr. CROFT

Monday, Wednesday, Friday, and Saturday, at 12 noon, during the third term. Demonstrations on Thursday at 9 a.m. Subjects:

Pelvis and female organs of generation.

Fœtus and membranes.

Signs, disorders, and complications of Pregnancy. Abortion.

Labour—(1) Natural, its mechanism and management; the puerperal state. (2) Abnormal—Lingering, precipitate and obstructed labour. (3) Preternatural. (4) Instrumental—Forceps, version, craniotomy, and its alternatives. (5) Complications and accidents of labour.

Diseases of the puerperal state.

The various presentations will be demonstrated on the Phantom, and practical instruction given in the use of obstetrical instruments.

A series of demonstrations is given by Dr. Croft during the third term, attendance upon which is required from all students taking the course of Obstetrics. Tutorial classes are also held from time to time for students preparing for their final examinations.

The necessary facilities are given by the Maternity department of the Infirmary, the Hospital for Women and Children, and the Leeds Maternity Hospital, for students to attend cases of labour.

By the rules of the Infirmary, the Maternity clerkship must not be taken until after the attendance upon this course of lectures and demonstrations has been completed.

Fee, £5 5s.; together with Gynæcology, £,6 6s.

#### **GYNÆCOLOGY**

#### Dr. Hellier

Monday and Wednesday at 4 p.m. during the first term. Subjects:

Methods of physical diagnosis in diseases peculiar to women; observations on the surgical anatomy of the female pelvis; functional and organic affections of the female pelvic organs; relation of these to diseases of the body generally.

Dr. Hellier will also give instruction in the diseases of new-born children, and in the management of infancy, including infant feeding.

Fee, £3 3s.; together with Obstetrics, £6 6s.

# THERAPEUTICS, PHARMACÝ, AND MATERIA MEDICA

Professor Trevelyan

Mr. Gough

#### I. Pharmacology and Therapeutics

Monday, Wednesday, and alternate Friday, at 4 pm. during the second term.

The subjects treated of will be the general principles of the treatment of disease, the physiological and therapeutic action of drugs, and the mode of their administration. On the alternate Fridays, remedial measures (other than drugs), including heat, cold, massage, electricity, climatic, and dietetic treament will be dealt with.

Fee, £3 3s.

#### II. Materia Medica and Pharmacy

Monday and Wednesday, 2.45 to 5 p.m., during the third term. Subjects:

Materia Medica: Sources, preparation, physical characters, pharmacopœial combinations, tests, doses, and general uses of the principal drugs.

Practical Pharmacy: General pharmaceutical processes; prescriptions; weights and measures; the compounding of a large series of typical prescriptions, including mixtures, pills, powders, emulsions, tinctures, lotions, inhalations, plasters, ointments, &c. The best methods of dispensing the principal drugs. Incompatibility.

The first hour is given to demonstrations and tutorial teaching in Materia Medica, the remaining time being devoted to Practical Pharmacy.

Fees: Materia Medica, £4 4s.; Practical Pharmacy, £3 3s.

#### PUBLIC HEALTH

Professor Cameron

Wednesday and Saturday, at 9 a.m., during the third term. Subjects:

Comparison of rates of mortality in town and country. Epidemic and endemic diseases and their prevention. Isolation hospitals. Disinfection and disinfectants. Influence of occupation on health. Factory and workshop legislation.

Meaning to be attached to death rates. How they are affected by constitution of the population in regard to age and sex.

Registration of births. Certificates of causes of death, for burial, for cremation.

Notification of infectious diseases.

The dwelling: site, subsoil, aspect, structure, lighting, ventilation, drainage, overcrowding.

Public and private water supplies, their dangers.

Disposal of refuse, including sewage.

Visits to works, &c.

Fee, £3 3s.

N.B. For candidates for degrees or diplomas in Public Health, this course will be supplemented by additional lectures.

#### FORENSIC MEDICINE & TOXICOLOGY

Professor Campbell

Dr. Eurich

#### 1. Forensic Medicine

Tuesday, Wednesday, Thursday, and Friday at 4 p.m. during the third term. Subjects:

The qualifications, duties, and responsibilities of medical

witnesses.

Questions concerning age, sex, identity, insanity and life insurance.

Death:—Real and apparent death; date of death; causes of sudden and violent death; post-mortem examinations.

Death by wounds; by lightning, burns, cold and starvation; by drowning, hanging, strangling and suffocation.

Rape; pregnancy; delivery; the legitimacy of children; abortion; infanticide.

Toxicology: -general considerations respecting poisoning; toxicological processes and the evidence of poisoning; symptoms of special poisons; treatment and analysis.

Fee, £5 5s.

#### II. Practical Toxicology

The class meets on Thursdays and Fridays from 3 to 5 p.m., in the third term, from early in June to the middle of July. Students receive practical instruction in the methods of detecting the commoner poisons, including

prussic acid and the cyanides, carbolic acid, oxalic acid, and the oxalates, arsenic and metallic poisons, mineral acids, caustic alkalies, alcohol, chloral and chloroform, alkaloids, &c.

Fee, £2 5s, including the use of apparatus.

#### OPHTHALMOLOGY AND OTOLOGY

Mr. SECKER WALKER

Tuesday and Friday at 9 a.m., during the third term. Subjects:

Ophthalmology: Surgical anatomy of the eye, theory of the ophthalmoscope, retinoscopy; emmetropia, hypermetropia, myopia, astigmatism; theory of accommodation; diseases of the conjunctiva and cornea, of the iris, ciliary body and choroid; cataract; glaucoma; diseases of the retina and optic nerve; functional diseases of the eye; affections of the ocular muscles and lacrymal apparatus; diseases of the orbit and eyelids.

Otology: Diseases of the external ear; diseases of the middle ear, their connection with naso-pharyngeal disorders; disease in the mastoid process, its extension to the cranial cavity; diseases of the internal ear.

Fee, £3 3s.

#### MENTAL DISEASES

Mi. Bevan-Lewis

Systematic lectures are given at the School of Medicine on Tuesday at 4 p.m., and clinical lectures and demonstrations at the West Riding Asylum, on Fridays, at 3.30 p.m., during the third term.

In the systematic lectures, the pathology, symptoms, medico-legal relations and treatment of insanity will be discussed.

The clinical course will embrace: Illustrations of the various forms of mental disease; instruction in the method of examining insane persons; practical demonstrations on the moral and therapeutic treatment of the insane; compulsory feeding, &c.; filling up certificates of insanity; class examinations.

The pathological aspects of insanity will be freely illustrated by morbid specimens and microscopic preparations from the museum of the Asylum.

Fee, £3 3s.

### III. COURSES OF INSTRUCTION FOR CANDIDATES PREPARING FOR PUBLIC HEALTH DIPLOMAS

For the regulations of the University for the diploma in Public Health see page 324.

The following courses of instruction are arranged to prepare for the University diploma, and for those of other examining bodies:

- I. Public Health. (See page 344).
- 2. Sanitary Chemistry. In the Chemical laboratory, College Road. (See page 244).
- 3. Bacteriology. At the School of Medicine during the second term. The course will include practical instruction in the pathology of those diseases of animals which are communicable from animals to man. Subjects: General sketch of bacteria; preparation of nutrient media; sterilisation; methods of cultivation; inoculation; microscopical examination and methods of staining; examination of the chief pathogenic bacteria anthrax, tubercle, typhoid, cholera, diphtheria, &c; methods of bacteriological examination of air, water, food.

Each student must be provided with a microscope approved by the Professor. The microscope must have an immersion lens and a condenser.

Fee, £5 5s.

4. Attendance at a Hospital for Infectious Diseases. A special course, including instruction in administration, is given in the Leeds City Hospitals. Times of attendance to be arranged.

Fee, £5 5s.

5. Practical Work in Sanitation. With the sanction of the Sanitary Authorities of Leeds, the Medical Officer of Health arranges courses of six months' instruction in out-door and office sanitary work. Fee for the course, payable in advance to Dr. Spottiswoode Cameron, at his office, 41, Park Square, between 10 and 11 a.m., £10 10s.

The University entrance fee of  $\mathcal{L}_{I}$  is charged to those who have not previously been students of the University, unless a sessional fee of 7s. is paid for each class attended.

#### HOSPITAL PRACTICE

- r. For degrees at the University of Leeds and certain other Universities, three years' hospital practice is necessary. One of these should be taken before the Second examination has been passed. Students intending to take such degrees should enter their names upon the Infirmary Register at the beginning of the third rear of their studies in medicine. Failure to do this will prevent them from completing the necessary attendance by the time when they would normally present themselves for the Final examination.
- 2. In order to be entered upon the Infirmary register a student must first pay his fees to the Treasurer of the Faculty (Dr. Barrs), at 25A, Park Square, and then interview the Secretary of the Faculty (Mr. W. Thompson), at 4, Park Square, to obtain advice in arranging his work at the Infirmary.
- 3. An introductory class is held twice a year, viz., in April and October. It consists of 15 demonstrations or lectures on elementary subjects, and is conducted by the resident medical, surgical, and ophthalmic officers. Students are required to attend this class as soon as possible after passing the Second or a corresponding examination, and before holding any Infirmary appointment.
- 4. The attention of students is directed to the necessity for carefully arranging, beforehand, the time at which they propose attending at the Fever hospital, as during the period of such attendance they are excluded from the surgical, ophthalmic and gynæcological wards and cannot act as maternity clerks.

Full information as to clinical instruction and appointments offered to students is contained in the prospectus of the School of Medicine

Leeds General Infirmary. The medical and surgical practice required by medical students is taken at this institution, which offers bundant opportunities for clinical study. Situated in the centre of a densely populated

manufacturing and mining district, and drawing patients also from a wide surrounding area, its wards present an ample field for the study of diseases and injuries. The concentration of medical, surgical, gynæcological, ophthalmic, aural and children's diseases in one hospital leads to much economy in time and labour to the student.

The nature of the work done in the Leeds Infirmary makes the clerkships and dresserships of great value, and the resident appointments involve so much practical work and personal responsibility as to give the holders a very varied and valuable experience.

Leeds Public Dispensary. About 40,000 medical and surgical cases are treated annually, partly as outpatients, and partly at their own homes. There are three resident medical officers, to each of whom a separate district of the city is assigned.

The practice of the Dispensary is open to any student on application to one of the honorary staff.

#### Leeds City Fever and Small Pox Hospitals

Students are admitted at the Leeds City Hospitals (Medical Superintendent, Mr. A. E. Pearson) on having obtained sanction from the Dean of the Faculty of Medicine, subject to such regulations as may be made from time to time by the Leeds City Council.

Students must abide by the rules laid down as to disinfection and other matters, and must satisfy the Corporation authorities that they are sufficiently protected against small pox by vaccination.

At the Small Pox hospital a minimum period of one week's residence may be required with payment in advance of 12s. a week for board and lodging.

The courses of instruction are from November to January (two meetings a week), February and March (three meetings a week), and April to July (two meetings a week). The hospitals are not open to students during August and September. Application for admission must be made to the Dean before the commencement of the course. Clinical lectures on infectious diseases will be given by the Medical

Superintendent of the hospitals, and the attendance of students at these lectures and on the practice must be

completed during the term for which they enter.

Those desirous of attending the practice outside the ordinary classes or clinical instruction, and not requiring a certificate of their attendance, must apply for permission to the Medical Officer of Health of the City of Leeds, Dr. I. S. Cameron, at his office in 41, Park Square, between the hours of 10 and 11 a.m.

Fee for the three months' course,  $f_{,2}$  2s.

Hospital for Women and Children. A limited number of senior students can here receive instruction in the practical treatment of diseases of women. hospital is recognised for this purpose by the University of Leeds. Application is to be made to one of the Honorary A new building for 55 beds is now occupied. including a maternity department for lying-in cases.

Leeds Maternity Hospital. The practice of the newly-founded Maternity Hospital in Tonbridge Street will be available for the instruction of a limited number of students, subject to regulations laid down by the Hon. Medical Officers.

West Riding Lunatic Asylum, Wakefield. This institution, which accommodates 1,900 patients, offers unusual advantages to those who desire to make themselves conversant with the treatment and management of the insane. Further accommodation in connection with the Asylum for 280 patients has been provided by the erection of a hospital for the treatment of acute insanity, and a separate home for 70 imbecile and idiot children has been btely opened. Clinical lectures and demonstrations are given at the Asylum in connection with the systematic lectures on insanity delivered at the School of Medicine, by Mr. W. Bevan-Lewis, Medical Director of the Asylum.

Instruction in Vaccination is given under the Local Government Board at the General Infirmary on Thursdays at 3 p.m., by Mr. A. T. Bacon, Instructor in Vaccination. Classes begin in October, February, and May. Each class consists of seven meetings, six of which must be attended, four of them consecutively.

Fee, £1 11s. 6d. Application to be made to the Dean.

#### Courses in Dental Surgery

#### COURSES HELD IN THE UNIVERSITY BUILDINGS, COLLEGE ROAD.

The courses arranged in Physics, Chemistry, and Elementary Biology are the same as those set forth in detail as Courses in Medicine on pages 238-243, 246, 250.

### 2. COURSES HELD IN THE SCHOOL OF MEDICINE.

The courses arranged in Anatomy, Principles and Practice of Medicine, Systematic Surgery, are on the lines of those set forth in detail as Courses in Medicine on pages 337, 341. The course in Physiology and Histology is also as stated on page 338, with the omission of II. Advanced Course. Attendance on Parts I. and II. Practical Physiology is required for the degree of B.Ch.D., Leeds, and on Part I. only for the Diploma.

Dental students attend a short course of lectures and laboratory instruction on Pathology and Bacteriology at times to be arranged.

#### DENTAL SURGERY.

Mr. Plumley.

Thursday at 12 during the first and second terms.

The course includes: Pathological conditions of the teeth and jaws; their surgical treatment.

#### OPERATIVE DENTAL SURGERY.

Mr. T. S. CARTER

Wednesday, at 4 p m., during the third term.

The course includes: Principles of dental operations; practical treatment of diseases of teeth and jaws.

#### DENTAL ANATOMY AND PHYSIOLOGY

Mr. ALAN FORTY

Thursday at 4 p.m. during the first and second terms.

The course includes: Development of jaws and teeth; the microscop cal anatomy of the teeth; homologies of teeth; comparative dental anatomy.

A course of Practical Dental Microscopy will be held during the third term.

#### DENTAL MECHANICS

Mr. Rippon

Tuesday at 4 p.m. during the first and second terms.

The course includes lectures and practical work in making impressions, plates, crowns, and the mechanical treatment of dental defects.

#### DENTAL METALLURGY'

Mr. Lowson

Monday at 11 a.m. during the first term (lectures). Thursday at 2 p m. during the second term (practical).

Physical and chemical properties of the metals; alloys; amalgams; solders; fluxes; methods of testing metals and alloys; dental cements and their preparation.

#### MATERIA MEDICA

Professor Trevelyan Mr. J. H. Gough

Monday and Wednesday, 2.45 to 3.45 p.m. during the third term.

The course includes the sources, preparation, physical characters, pharmacopæial combinations, tests, doses and general uses of the principal official drugs.

After each lecture a tutorial class is held in which the students are exercised in the actual recognition of the most important drugs.

<sup>1</sup> These lectures will be given at College Road.

#### **EVENING CLASSES**

The University has instituted Evening Classes in the following subjects:

- 1. Civil and Mechanical Engineering, Electrical Engineering, Coal Mining, Textile Industries, Dyeing and Tinctorial Chemistry, and Leather Industries. By a recent arrangement with the Education Committee of the Leeds City Council, the instruction in these subjects is co-ordinated with the City's scheme of evening classes in Technology.
- 2. English Literature and Economics.

#### I. Classes in Technological Subjects

The dates of the evening class session in these subjects will be September 23 to December 19, 1907; January 7 to April 13, 1908.

The fee for the whole, or any portion, of a group course is 10s. 6d., payable to the Registrar in advance.

All candidates for admission to these classes are required to furnish evidence of adequate preparation for the course of study which they propose to take. Unless they hold certificates of satisfactory attendance at the Leeds City evening schools or other recognised institutions they will be required to pass an entrance test, but the Head of the Department will exempt at his discretion such candidates as have satisfied him that they possess sufficient preliminary knowledge. An examination for this purpose will be held at the University on various dates for which see prospectus of Evening Classes. All students desiring to enter for any of these classes must apply to the Registrar not later than Monday, September 16, stating their intention of presenting themselves for the examination or applying for exemption therefrom.

Students entering late in the session will be required to satisfy such test as the Head of the Department may see fit to impose.

<sup>1</sup> The Three Years' Coal Mining Course will be held during the three terms of the day session. (See page 117).

#### CIVIL AND MECHANICAL ENGINEERING1

Professor Goodman Mr. Gilchrist Mr. MacLachlan Mr. Duncan

#### Mr. Thomson

Attendance for four sessions at the Leeds City evening classes in Mathematics, Mechanics, and Machine Drawing, is accepted as a qualification for admission to the evening classes in this Department. The entrance examination for students who are not able to present certificates of satisfactory attendance upon the above or other preparatory classes will consist of papers in Elementary Mathematics (including Algebra up to quadratic equations, Logarithms, Trigonometry up to the solution of triangles, and Geometry equivalent to Euclid, books i and ii) and in the special subject of study.

The evening courses are arranged to cover the work required for the examination for Associate membership of the Institution of Civil Engineers.

#### The Theory of Heat Engines

A course of lectures by Mr. MacLachlan on Tuesdays, from 7.30 to 8.30 p.m.

#### Engineering Laboratory

The following courses of instruction will be given by Messrs. MacLachlan, Duncan and Thomson, in the Engineering laboratory on Wednesdays, from 7.30 to 9.30 p.m.

#### Course A. Testing of Materials

The testing of iron, steel, alloys, &c., in tension, torsion, compression, bending, and punching. This work is done on:

- 1. A 100-ton Buckton testing machine, fitted with an autographic recorder.
- 2. An Olsen machine of 50,000 lbs. capacity.
- 3. A Denison machine of 5,000 lbs. capacity.
- 4. Special app: ances for torsion testing.

<sup>1</sup> For further details see the special prospectus of the Engineering Departments or the Evening Class prospectus.

#### Course B. Steam, Gas, and Oil Engines

Testing pulsometer, indicating and testing steam, gas, and oil engines, testing a De Laval steam turbine. Steam boiler and engine trials. The indicating and testing work is done on a 70 h.p. compound Willans engine; a 30 h.p. Fowler compound engine; a small fan engine; a Premier gas engine of 15 h.p.; a Campbell 13 h.p. oil engine; and a small petrol engine.

Course C. Hydraulics

Experiments on the flow of water over weirs and through orifices, the friction of water in pipes, the pressure of jets on surfaces, the bursting strength of pipes, &c., by a Berry's high pressure test pump.

Tests of a Pelton wheel; a Gilkes' turbine, fitted with a Kent Venturi water meter; a 6" × 4" Green reciprocating

pump; a Hett centrifugal pump.

#### Machine Drawing and Design

A course of instruction by Mr. Thomson on Thursdays from 7.30 to 9.30 p.m.

#### Steam Turbines

A course of lectures by Mr. MacLachlan on Tuesdays from 8.30 to 9.30 p.m., for students attending or who have attended the above-mentioned course by the same lecturer on The Theory of Heat Engines, given in the preceding hour of the same evening.

## The Design of Elementary Structures employed in Civil Engineering, and the use of Graphic Methods

A course of lectures by Mr. Gilchrist on Fridays from 7.30 to 8.30 p.m.

#### The Strength and Elasticity of Materials

A course of lectures by Mr. Thomson on Fridays from 8.30 to 9.30 p.m.

#### ELECTRICAL ENGINEERING

Mr. Parr Mr. French

The entrance requirements are similar to those in the department of Civil and Mechanical Engineering. (See page 354).

For further details see the special prospectus of the Engineering Departments or the Evening Class prospectus,

Two separate evening courses of instruction (A & B) are given in Electrical Engineering, each consisting of a course of lectures together with a corresponding course of practical work in the laboratories. Course B forms a continuation of Course A. The laboratory work in each course is specially designed with the view of assisting students in understanding the lectures. Lectures and laboratory work may be taken separately, but students are advised to take both together. The two complete courses A & B practically cover the ground for the Preliminary, Ordinary, and Honours grades of the Electro-technological Examinations of the City and Guilds of London Institute.

#### Course A

Lectures on Thursdays from 7 to 8 p.m, beginning October 3. Laboratory work on Mondays from 7 to 9 p.m., beginning October 7.

#### Course B

Lectures on Thursdays from 8.5 to 9.5 p.m., beginning October 3. Laboratory work on Tuesdays from 7 to 9.30 p.m., beginning October 8.

#### Jointing Course

This course may be taken either as a separate course or in lieu of part of the above experimental courses. On Tuesdays from 7 to 9 p.m., beginning October 8.

#### COAL MINING

Professor Thompson

Mr. Perkin

The entrance requirements are similar to those in the department of Civil and Mechanical Engineering. (See page 354). Attendance for two sessions at the Leeds City classes is accepted as a qualification, and the standard of the entrance examination is correspondingly lower.

#### Three Years' Coal Mining Course

This course is intended for miners and sub-officials who are occupied in or about collieries, and can only attend for one afternoon per week, but desire to qualify themselves for

Managers' Certificates under the C.M.R. Act, and particularly for those who have attended complete courses of instruction in Mining at one of the local centres appointed by the West Riding County Council, or have attended the preparatory evening courses of the Leeds City Council.

The course extends over three years. and third year students attend on Mondays from 3 to 7 p.m.; the second year students on Tuesdays during The instruction in Engineering, the same hours. Electrical Engineering, and Geology is given in respective departments, the remaining subjects in Mining Department. In the class on Mathematics the subject is dealt with entirely from the mining point of view, the examples being taken from mining practice. Students are given mining data in the examples set, and are required to copy these out into an indexed pocketbook to form a nucleus for the observations which they subsequently make as a result of their own experience. similar mode of treatment is adopted for the Chemistry course, the properties of matter and chemical change being illustrated as far as possible from ordinary examples to be met with at a coal mine. In addition to the course of Surveying drawing, a course of practical work in the use of surveying instruments is given. Lectures are given in connection with the two Surveying courses as they become necessary to explain the work in hand.

The first and third year courses begin on Monday, October 7, and the second year on Tuesday, October 8. Students must register their names and take out their class tickets on either October 7 or 8, between 2 and 3 p.m.

#### Syllabus

First Year	Second Year	Third Year
Mathematics	Mining	Electricity
Engineering	Chemistry of Coal	Mining
Engineering Laboratory	Mining	Electrical Engineer-
Mining	Surveying	ing Laboratory
•	Geology	,

#### Special Coal Mining Course

To suit the convenience of students who are not able to attend the Three Years' Course, a special course of lectures will be given on Saturdays, from 7 to 8 p.m. during the evening session, beginning on September 23.

#### TEXTILE INDUSTRIES!

#### Professor Beaumont

Mr. Hollis Mr. Yewdall Mr. Law Mr. Farley Mr. Holloway Mr. Fox

#### Woollen Yarn Manufacture

First Year: Lectures, on Thursdays, from 7 to 8 p.m.; Recording Experiments and Testing, on Thursdays, from 8 to 9 p.m.; Sketching Machine Details, on Fridays, from 8 to 9 p.m.

Second Year: Lectures, on Thursdays, from 8 to 9 p.m.; Sketching Machine Details, on Wednesdays, from 7 to 9 p.m.; Recording Experiments and Testing, on Thursdays, from 7 to 8 p.m.; Experimental Spinning, on Fridays, from 7 to 9.30 p m.

#### Worsted Yarn Manufacture

First Year: Lectures, on Fridays, from 7 to 8 p.m.: Recording Experiments and Testing, on Fridays, from 8 to 9 p.m.; Sketching Machine Details, on Thursdays, from 8 to 9 p.m.

Second Year: Lectures, on Fridays, from 8 to 9 p.m.; Recording Experiments and Testing, on Fridays, from 7 to 8 p.m.; Sketching Machine Details, on Tuesdays, from 7 to 9 p.m.; Experimental Spinning, on Thursdays, from 7 to 9.30 p.m.

#### Designing and Weaving

First Year: Lectures, on Tuesdays, from 7 to 8 p.m.; Pattern Analysis, on Tuesdays, from 8 to 9 p.m.; Sketching Machine Details, on Fridays, from 7 to 8 p.m.; Design Practice and Calculations, on Fridays, from 8 to 9 p.m.

Second Year: Lectures on Designing and Weaving, on Wednesdays, from 7 to 8 p.m.; Lectures on Colouring, on Wednesdays, from 8 to 9 p.m.; Pattern Analysis, on Mondays, from 7 to 8 p.m.; Design Practice and Calculations, on Mondays, from 8 to 9 p.m.; Sketching Machine Details, on Thursdays, from 7 to 8 p.m.; Experimental Weaving, on Thursdays, from 8 to 9.30 p.m.

<sup>1</sup> For further details see the special prospectus of the Textile Industries Department or the Evening Class prospectus.

Third Year: Lectures on Designing, on Mondays, from 7 to 8 p.m.: Lectures on Colouring, on Mondays, from 8 to 9 p.m.; Pattern Analysis, on Wednesdays, from 7 to 8 p.m.; Experimental Weaving, on Wednesdays, from 8 to 9.30 p.m., and on Thursdays, from 7 to 9.30 p.m.

#### DYEING AND TINCTORIAL CHEMISTRY

Professor Green

Mr. Steven Mr. Orchardson

Candidates for admission to either course in this department are required to produce evidence of a sufficient preliminary training in Chemistry.

The courses of instruction will consist of Lectures and Experimental Dyeing, either of which can be attended separately.

Lecture Course

A course of twenty-six lectures on the technology of the Textile Fibres, Dyeing and Dyeing Materials will be given on Mondays from 7 to 8 p.m., beginning September 30, 1907.

The course is intended to meet the needs of practical men and foremen dyers.

#### Experimental Dyeing Course

This class is held on Mondays, between 8 and 10 p.m. It is intended for apprentice and foremen dyers, or others engaged in practical work during the day, and will also be found useful for all those who in their daily business handle dyed materials. No previous knowledge of dyeing is required from those attending.

Students in this class will make systematic dyeing trials with the different groups of natural and artificial dyestuffs.

#### LEATHER INDUSTRIES

Professor Procter

Mr. Brumwell Mr. Bennett

Candidates for admission to the course in this department are required to produce evidence of a sufficient preliminary training in Chemistry.

#### The Preparatory Stages of Leather Manufacture.

A course of lectures on Wednesdays, from 7 to 8 p.m., followed, by demonstrations and laboratory work from 8 to 9.30 p.m. The introductory lecture will be given by Professor Procter on October 2; the remaining lectures by the junior members of the Staff.

#### II. Classes in Non-Technological Subjects

The evening class session in these subjects covers the first and second University terms.

The fees vary according to the classes attended

#### ENGLISH LITERATURE

#### Studies in Contemporary English Literature

A course of six lectures by Dr. Moorman on Fridays at 7.30 p.m. during the first term, beginning October 11, 1907. Fee for the course, 3s.

#### **ECONOMICS**

#### General Economics

A class in General Economics, conducted by Professor Clapham, will be formed, if desired, suitable for students preparing for the final examination of the Bankers' Institute, or for others who have already an elementary knowledge of Economics. The course will comprise twenty lectures, ten before and ten after Christmas, and will begin on Thursday, October 10, 1907, at 7 p.m.

Those who wish to join this class are requested to communicate with Professor Clapham not later than October 5.

Fee for the course, 10s.

#### Types of Nineteenth Century Socialism

A course of six lectures by Professor Clapham, on Fridays at 8 p.m., beginning on January 17, 1908. Fee for the course, 3s.

#### The Law of Mortgage

A course of fire lectures by Dr. Chapman, on Fridays at 8 p.m., beginning October 11, 1907.

Fee for the course, 3s.

#### Geology

#### Professor Kendall

#### Geology applied to Sanitary and Civil Engineering

On Mondays, during the second and third terms, at 5 p.m. Syllabus. Stratified rocks, their mode of origin and physical peculiarities. Forms of stratification, folds, joints, and faults.

General succession and lithological characters of the stratified rocks.

The origin and distribution of the drift deposits.

British rainfall, its measurement and variations. The destination of this water. Evaporation, discharge by rivers and percolation, how they are proportioned and upon what conditions they depend. The mode and rate of percolation of underground water. The water-bearing capacity of sandstones and limestones. How water is stored in these rocks.

The principal water-bearing strata of Britain, and the character of the supplies which they yield. Some detailed examples of the supply of water from deep wells.

The application of geological knowledge to selection of sites for bridges, roads, tunnels, puddle-trenches, sewage-farms, &c.

Fee, 10s. 6d.

#### Scholarships

For information as to Scholarships tenable by Evening students see page 388.

#### **EXTENSION LECTURES**

Honorary Secretary: F. W. MOORMAN, B.A., Ph.D., Assistant Professor of English Language and Literature.

The University supplements the academic work carried on within its walls by instituting courses of Extension Lectures for those who are unable to attend the classes held in the University itself. With this end in view, it has secured the services of members of its staff who have had experience as teachers, and whose subjects are most likely to prove of interest to University Extension audiences. It has also added to its list of Extension Lecturers the names of scholars who are not members of the University staff, but who have made a special study of subjects of higher education suitable for Extension courses.

#### LOCAL ARRANGEMENTS

Before the University can undertake to provide for the delivery of a course of Lectures in any particular locality, the following steps must be taken:

1. A Local Committee must be appointed. Such Committee may be:

(a) A Committee specially appointed for this purpose;

(b) A public body, such as the Education Committee of a County or County Borough, the Education Committee of a Co-operative Society or Trades Union Council, the Committee of a Public Library or of some other organised institution.

2. A fund sufficient to cover the University charges must be guaranteed by the Local Committee.

#### LECTURE COURSES

The following courses of University Extension Lectures can be provided:

Sessional Courses ... Twenty to twenty four lectures.

Terminal Courses ... Ten to twelve lectures.

Semi-terminal Courses Not less than five lectures.

Pioneer Courses ... Not more than four lectures.

Lectures are given either in successive or alternate weeks, usually in the first and second terms (October -March). Each lecture lasts, as a rule, about an hour, and is followed,

or preceded, by a class. The holding of the class is a matter of great importance, the object being to give opportunity for a fuller discussion of the matter contained in the lectures, and to bring the lecturer into closer touch with his audience. Questions bearing on the lectures are also set by the lecturer; the written answers to such questions are sent to the lecturer by post, and are then corrected by him and returned at the following class. In connection with some of the lecture courses, arrangements are made to supplement the lecture and class by excursions of an educational character.

#### **EXAMINATIONS AND CERTIFICATES**

At the conclusion of a sessional or terminal course of lectures the University appoints an Examiner, who is not the Lecturer, to examine those students who, having fulfilled the requirements for entrance to the examination, desire to compete for a certificate. Students are not admitted to this examination unless they have attended at least three-fourths of the lectures and classes, and have satisfied the lecturer with their written work. All candidates for certificate examinations must have reached the age of fifteen years.

Students who pass the examination held on the conclusion of a sessional course are awarded a sessional certificate; those who pass the examination held on the conclusion of a terminal course are awarded a terminal certificate.

No certificate is awarded on a course of less than ten lectures; but, if desired, an examination may be held at the conclusion of a semi-terminal course.

In certain cases, candidates may be awarded, after examination, the termical certificate on the work of two semi-terminal courses.

In all awards of certificates, weight is given to the weekly papers as well as to the final examination.

#### **SYLLABUSES**

The ground to be covered by the lectures and the mode of treatment adopted are indicated by a Syllabus, published at the commencement of the course. The Syllabus contains lists of books recommended, and the lecturer gives advice as to the choice of books and methods of study.

#### TRAVELLING LIBRARIES

Travelling Libraries are issued by the University, in connection with courses of University Extension Lectures, each Library containing a selection of books, chosen by the lecturer as the most suitable to be studied for the course concerned.

#### **EXPENSES**

For particulars of financial arrangements in connection with the establishment of Extension courses, see the special prospectus.

The Education Committee of the West Riding County Council is prepared, in certain cases, to make grants to local authorities within the area of the West Riding County Council, to assist them in meeting the expenses incurred in connection with the delivery of lecture courses. For fuller information on this matter, Local Committees should apply to the Education Department, West Riding County Council, Wakefield.

#### **PROSPECTUS**

The Registrar will send, on application, a prospectus containing further information as to the organisation of Extension courses, together with a complete list of lecturers and subjects in the departments of Arts (including Fine Art), Science (including Medicine), and Law.

# COUNTY LECTURES IN AGRICULTURE, &c.

The County Councils of the three Ridings of Yorkshire make annual grants to the University to enable it to carry out a system of instruction on subjects connected with Agriculture, and in the case of the West Riding to give practical instruction also in dairy work at various centres.

The members of the staff engaged in this work are: Prof. R. S. Seton, Mr. R. W. Haydon, Mr. Charles F. Archibald, Mr. J. G. Stewart, Mr. F. Parton, Mr. T. Redington, Mr. A. Gaut, Miss McKerrow, and Mr. W. Jones Anstey.

#### County Lectures

Each course consists of five or ten lectures given in the evenings at intervals of one week. Each lecture may be followed by a class at which questions may be asked of the lecturer. Before the University enters into any arrangements with a locality for the delivery of such a course of lectures, a Local committee must be appointed, with a secretary to correspond with the University. The Local committee will be required to guarantee a certain average attendance, also the local expenses, consisting of hire of hall, advertising, &c. With these exceptions the lectures will be given free.

The subjects treated in the several courses embrace: Results of Garforth experiments, soils and their properties, manures, farm crops, insect pests and diseases of crops, the management of grass land, live stock and feeding stuffs, dairying and poultry keeping, horticulture and fruit culture, small farming and gardening, management of allotments, the foot of the horse, and the principles of horse shoeing.

#### Dairy Instruction

The Dairy School at Garforth is open for practical instruction during the summer months. Courses of six weeks' duration are given in butter and soft cheese making.

The fee for the course is  $\mathcal{L}_3$ .

Single demonstrations on butter-making are given at centres in the East and West Ridings, in the interval between the courses held at Garforth.

#### Field Experiments

The Agricultural department of the University undertakes the laying out and supervision of field experiments to illustrate the principles of agricultural and horticultural practice.

Reports on these experiments may be had on application to the Professor of Agriculture

### Instruction in Horticulture in Schools in the East and West Ridings

The Agricultural department of the University supervises the instruction in horticulture given in school gardens connected with various evening continuation schools in the East and West Ridings.

#### Instruction in Horticulture at Garforth

A course of Horticulture and Experimental Plant Physiology will be conducted on Saturdays at the Manor Farm, Garforth, beginning on September 7, 1907, and concluding about the end of the following May. The class is for teachers of Horticulture and those intending to teach this subject. The mornings will be given to the discussion of the principal horticultural processes and their actual practice in the garden, and the afternoons to botany.

The fee for the course is  $f_{11}$  125. 6d.

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#### Instruction in Farriery

Instruction in Horse Shoeing has been provided for and takes the form of practical demonstrations in the making of shoes and the shoeing of horses in smithies easily accessible to apprentice smiths in different localities. The work is so arranged that the apprentices attend one afternoon or evening in each week during the period the Instructor is in attendance. The classes are preceded by a lecture on the foot of the horse and the principles of horse shoeing, and at the conclusion of the lecture those smiths who intend to join the practical class are asked to give in their names

### FELLOWSHIPS, SCHOLARSHIPS, EXHIBITIONS, BURSARIES, FREE STUDENTSHIPS, AND PRIZES

#### GENERAL REGULATIONS

Applicable to all Scholarships

- 1. No election to a Scholarship will take place unless the candidate has attained a sufficient standard of merit.
- 2. All Scholarships are held subject to the good behaviour of the Scholar. The Council reserves the power to determine the tenure of a Scholarship for the Scholar's irregularity in attendance at lectures, or for any other sufficient cause. A Scholar who fails in any University examination for which he prepares in the University, or who is reported unsatisfactory in the aggregate of his terminal examinations during the session, will forfeit his Scholarship, unless his retention of it be specially recommended by the Senate.
- 3. Scholars are required to devote the whole of their time to their studies. Except in special cases, the undertaking by a Scholar of outside work, such as teaching, or the acceptance of any post of profit outside the University will involve surrender of the Scholarship, unless such work be undertaken with the sanction of the Vice-Chancellor. The Clothworkers' Scholars and others preparing for any profession or trade, the principles of which are taught in the University, will be granted special exemption from this rule if the Senate is satisfied that an adequate cause has been shown for such exemption, and approves the arrangement proposed in each particular case.
- 4. The Senate reserves power to declare any Scholarship or Exhibition vacant or to reduce its value on the ground that the Scholar has previously or subsequent to his election acquired another Scholarship.
- 5. Scholars who are preparing for University degrees are required to present themselves for the degree examinations of the University of Leeds, and are not allowed (except by the special permission of the Senate) to present themselves for the examinations of any other University.

## Applicable to Senior Scholarship's

6. A student holding a Senior Scholarship open only to registered students of the University will not be allowed to compete a second time for a Scholarship without the express permission of the Senate.

## Applicable to Entrance Scholarships

7. Candidates for an Entrance Scholarship may be required to undergo a vivá voce examination, in addition to the examination by written papers.

## Applicable to Scholarships awarded at Matriculation

- 8. The University does not charge any fee to candidates who present themselves at the Matriculation examination *as Scholarship candidates only* and who do not require any certificate of having passed the examination for Matriculation purposes.
- 9 Those who are candidates for Matriculation as well as for Scholarships must conform to the Regulations of the Joint Matriculation Board as to filling up the prescribed entrance form and paying the Matriculation fee of £2.
- To. In certain cases (see Regulations for the separate Scholarships), successful candidates are required to pursue degree courses in the University as a condition of the tenure of their Scholarships. Should such candidates not have paid the Matriculation fee of  $\pounds_2$  prior to the examination they will be required to pay it before entrance at the University. On payment of it they will be entitled to Matriculation certificates.

#### I. FELLOWSHIPS

## (a) University Fellowships

A limited number of Fellowships may be awarded to students who have shown special merit in the Final examinations in the Honours Schools of the University, for the purpose of assisting them to prosecute research and study of a post-graduate character.

A scheme of Regulations for the award and tenure of these Fellowships is under consideration

1905 Marshall, Joseph, B.Sc. (Chemistry). £100. Waterhouse, Osborn, B.A. (English). £100.

### • (b) Fellowship for Gas Research

The Fellowship, of the value of £100 per annum, will be awarded by the Senate, on the recommendation of the Board of Science and Technology, to a duly qualified candidate for the prosecution of post-graduate research in gas chemistry. Preference will be given to candidates who have signified their intention of entering the coal gas industry, or in default of any such candidate, to a person qualifying for some other branch of fuel industry.

The award of the Fellowship will be made annually during the month of June, after due advertisement of it in the technical press and other appropriate journals. Applications for the Fellowship must be made to the Registrar of the University on or before May 1 of each year.

It will always be within the power of the Senate, on the recommendation of the Board of Science and Tech nology, to renew the Fellowship to the holder of the same for a further period of a year, instead of proceeding to a fresh election

The holder of the Fellowship shall undertake research work in the University under the direction of the Professor of Fuel and Metallurgy on some subject connected with the chemistry of gases and combustion. The selection of the subject, and the method of carrying on the work, will be feft to the judgment of the Professor responsible for its direction.

The University will provide, free of charge, all reasonable accommodation and facilities required for the prosecution of the research undertaken by the holder of the Fellowship, including working space and the use of such instruments and appliances installed as part of the equipment of the Fuel and Metallurgical Department. Any special expenses, not exceeding £25, incurred during the prosecution of the research will be defrayed by the Institute of Gas Engineers.

A report of the research work carried out by the holder of the Fellowship shall be submitted to the Council of the Institute of Gas Engineers, as well as to the Senate of the University, on or before May 1st, of each year, together with copies of any papers published in connection with the research.

## II. SCHOLARSHIPS TENABLE ONLY BY GRADUATES OF THE UNIVERSITY

#### 1. University Scholarships

A limited number of Scholarships may be awarded to students who have shown special merit in the Final examinations in the Honours Schools of the University.

A scheme of Regulations for the award and tenure of these Scholarships is under consideration.

Armes, Henry Percy, B.Sc. (Chemistry).
 Gunnell, Doris, B.A. (Modern Languages).
 Holmes, Carrie, B.A. (English).
 Edwards, Maud Mary, B.A. (Modern Languages).
 Gregory, Frederick Maurice, B.Sc. (Engineering).

1906 Hodsman, Henry James, B.Sc. (Chemistry). Butterworth, George William, B.A. (Classics). Holgate, Edward, B.Sc. (Engineering).

1907 Cross, William Ernest (Chemistry).
Davies, Hanniton (Chemistry).
Fairley, Barker (Modern Languages).
Shuttleworth, Newton (Electrical Engineering).
Thorp, Hilda (Modern Languages).
Walker, Jessic (English).

## 2. Gilchrist Studentship in Modern Languages

This Studentship was instituted in 1905 by the Gilchrist Educational Trust, founded by Dr. Gilchrist, who died in 1841, for "the benefit, advancement and propagation of education and learning in every part of the world, as far as circumstances permit." It is of the value of £80, is tenable for one year, and is open for graduates of either sex who have taken Honours in Modern Languages in the Final degree examination of the University, and who are proposing to enter t! e profession of teaching in secondary schools. The purpose of the Studentship is to enable the holder to pursue a special course of study abroad with a view to qualifying himself (or herself) for teaching modern languages in a secondary school.

The regulations are as follows:

- 1. The Studentship is awarded annually by the Gilchrist Trustees.
- 2. Candidates must have obtained Honours in Modern Languages in the Final examination for a degree, and be recommended by the University after consultation with the

<sup>1</sup> Renewed in 1906.

Professors concerned, and after special inquiry into the suitability of the candidates for the profession of teacher in a secondary school. If possible, two names shall be submitted each year to the Trustees for their consideration. Save in exceptional circumstances, of which the Trustees shall be the sole judges, the examination must be that immediately preceding the date of application.

- 3. The holder of the Studentship will be required to follow a course of preparation for the profession of Modern Language teacher, and must submit his (or her) proposed course of work for the approval of the Trustees, who will take steps to satisfy themselves that the course of preparation proposed to be undertaken is suitable for the purpose in view.
- 4. The tenure of the Studentship is for one year beginning on the date of election, and the emoluments will be paid half yearly by the University on production of evidence that the proposed course of preparation is being satisfactorily carried out.
- 5. The Student will be required, at the expiration of the tenure of the Studentship, to make a report to the University, setting out the course of work and preparation which has been pursued, and this report together with a covering communication from the University shall be forwarded to the Trustees.

1906 Edwards, Maud Mary

## 3. Research Scholarship in Dyeing and Tinctorial Chemistry

This Scholarship, of the value of £60 a year, tenable in the Department of Dyeing and Tinctorial Chemistry, will be awarded annually upon the results of the Final examination for the B.Sc. degree, preference being given to candidates who graduate with Honours in Applied Chemistry (Colour Chemistry and Dyeing).

The Scholarship will be awarded for one year, but may, at the discretion of the Examiners, be extended to a second year.

The Scholar will be required to devote his whole time to carrying out some special branch of research in Colour, Chemistry or Dyeing.

1907 Baddiley, James

## III. 1851 EXHIBITION SCIENCE SCHOLARSHIP

Since 1891 the Commissioners for the Exhibition of 1851 have placed at the disposal of the Yorkshire College, now the University of Leeds, the nomination to one Scholarship of the annual value of £150, tenable ordinarily for two years, and in rare instances for three years. The continuation each year after the first will depend upon the work done in the previous year being satisfactory to the Scientific Committee appointed by the Commissioners.

The Scholarship is limited to those branches of science (such as Physics, Mechanics, and Chemistry), the extension of which is specially important for our national industries.

Candidates must (a) be British subjects; (b) be bond fide students of science of three years standing at least in Universities or Colleges in which special attention is given to scientific study; (c) either have been engaged in study at the University for a full year prior to the 1st of April following the date of application, or have been students of the University for a full year ending within twelve months prior to the 1st of April following the date of application, and, having since ceased to be students, have been engaged solely in scientific study: (d) indicate high promise of capacity for advancing science or its applications by original research.

A recommendation can only be made in favour of a student who has already given proof of both ability and desire to make original investigations. In the opinion of the Commissioners the most suitable evidence that a candidate possesses these qualifications is a satisfactory account of a research already completed by him, and they will decline to confirm a recommendation unless such an account is furnished, or there is other equally distinct evidence that the qualifications of the candidate are such as are above indicated.

Applications will be received by the Registrar of the University up to the last day of February in each year.

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1891-4 Ingle, Harry, B.Sc.

1892-4 Mann, Harold Hart, B.Sc.

1893-6 Myers, John Ellis, B.Sc.

1894-6 Dent, Frankland, B.Sc.

1896-9 Dawson, Harry Medforth, B.Sc.

1897-1900 Wilson, Harold Albert, B.Sc.
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1898–1901 Calvert, Harry Thornton, B.Sc.
1901–3 Skintow, Frederick William, B.Sc.
1901–4 Denison, Robert Beckett, B.Sc.
1902–5 Dakin, Henry Drysdale, B.Sc.
1903–6 Gaunt, Rufus, B.Sc.
1904–7 Raper, Henry Stanley, B.Sc.
1905–7 Zortman, Israel Hyman, B.Sc.
1906–8 Armes, Henry Percy, B.Sc.
1907-8 Hodsman, Henry Pames, B.Sc.

## IV. SCHOLARSHIPS OPEN TO THE COMPETITION OF STUDENTS OF THE UNIVERSITY ONLY

# I. Tenable in the Faculties of Arts, Science and Technology

## Leighton Trustees' Scholarships

These Scholarships were instituted in 1894 by the Trustees of the late Mrs. Isabel Leighton of Leeds,

Candidates must be registered students of the University of not less than two terms standing. They must have attended a Public Elementary school or schools in the City of Leeds for not less than three years.

Three Scholarships are ordinarily offered each year, each of the annual value of  $\mathcal{L}_{10}$ , and tenable for two years, subject to the reports on the student's work during the first year of tenure being satisfactory.

The Scholarships will not be awarded on any special examination, but those students who are desirous of becoming candidates are required to send in their names to the Registrar not later than May 1 in each year.

In recommending candidates for appointment, the Senate will be guided by the position held by the candidates in their terminal examinations, and also by their general work and conduct. The need of the applicants for pecuniary assistance will also be taken into consideration.

The Scholarships are tenable by day students pursuing any course of study in the Faculties of Arts, Science and Technology, and may, with the consent of the Trustees, be held in conjunction with any other Scholarship.

The election will be made in the third term of the session, provided that there be suitable applicants.

1894	Gough, William	1903	Appleyard, John Ernest
1895	Hampshire, Florence		Robinson, Lilian Dorothea
	Elizabeth		Waite, Joseph Henry
1896	Shacksnovis, Reuben	1904	Carlton, George
1897	Porritt, Florence Mary		Westerdale
,	Scholes, Thomas Wilfrid		Maddison, Wilfred Guy
1898	Gawler, Robert		Thorp, George
1899	Crosfill, John	1905	Lacy, Arthur
,,,	Phillipson, Coleman	, ,	Vernon, Edgar
1900	Savage, Hilda	1906	Hogan, Kathleen
	Robinson, Ethel Margaret	1907	Everett, Percy Newton
1901	Burgess, Lillie	<i>y</i> = <b>1</b>	Marsh, Frank Salton
•	Scholefield, Fred		Turner, Frederick William
1902	Calam, Harold		,
,	Landman, Samuel		
	Stead, Frank Cawthron		

## 2. Tenable in the Faculty of Arts Salt Scholarship

This Scholarship was founded by the late Sir Titus Salt, Bart., in 1875.

Candidates must be scholars or registered students of the University in at least their sixth term.

The value of the Scholarship is £20 a year, and it is tenable for two years.

The Scholarship is awarded at the discretion of the Senate, with or without examination.

The Scholar elected will be required to pursue a course of study at the University preparatory for a degree in Arts of the University of Leeds.

Applications from candidates for these Scholarships must be sent to the Registrar of the University not later than May 1.

1882	Wright, Benjamin	1897	Robinson, Elizabeth Clare
1885	Barker, Arthur Henry	1899	Melville, Ellen Louisa
1887	Jackson, Thomas Chalice	1901	Stevenson, Ethel Mary
1891	Hurst, Thomas Ockerby	1903	Davis, William Hathaway
1893	Cleasby, Mabel	1904	Landman, Samuel
1895	Hornby, George Goodall	1906	Gill, William Conrad

## 3. Tenable in the Faculty of Medicine Infirmary Scholarship

This Scholarship was founded in 1888 by the Faculty of the Leeds General Infirmary. It is of the value of 40 guineas and consists of a free ticket to the clinical teaching of the Leeds Infirmary. The holder is required to enter as a student for the whole medical curriculum at the University in the session following the date of examination.

Previously to 1906 this Scholarship was awarded as an Entrance Scholarship, on the results of an examination in Arts subjects. It is now awarded, after a report from the examiners, on the results of the First M.B. examination of the University of Leeds, held in June of each year. Candidates must send in their names to the Secretary of the Faculty, General Infirmary, Leeds, not later than June 1.

1889	Fearnsides, Philip Henry	1899	Smailes, William Herbert
1890	Gross, Phineas	1900	Gough, Alfred
1891	Greenwood, Henry Harold	1901	Rawlings, Harry Richard-
1892	Field, Richard Cullingworth	-	son
1893	Dewhust, Wilfrid Arthur	1902	Pickles, William Norman
1894	Andrews, Joseph Dalby	1003	Carlton, George Westerdale
1895	Pegler, William Vernon	1904	No award
1896	Matthews, Crawford Tait	1905	No award
1897	Middlemiss, James Ernest	1906	Fisher, John Barugh
	Heald, Samuel Linley	1907	Sinson, Julius Barnet

# 4. Tenable in the Faculty of Technology Clothworkers' Company Day Scholarships

These Scholarships were founded in 1875 by the Worshipful Company of Clothworkers of the City of London, who offer three Scholarships, each of the value of £20, to students in the Department of Textile Industries Two of these Scholarships are awarded to students at the beginning of their second year, and one to a student at the beginning of his third year.

Each Scholarship is tenable for one year. Students holding Day Scholarships will be required to attend an Advanced Course in Textile Industries, and the Senior Class in Applied Art. The Day Scholarships are only tenable by students not more than twenty four and not less than sixteen years of age on the 1st of October following the date of examination.

Students holding Scholarships are expected to present themselves for examination (in the University) by the City and Guilds of London Technical Institute, in one of the following subjects, viz.: Textile Fabrics—Spinning and Weaving of (a) Wool and Worsted, (b) Cotton, (c) Linen, (d) Silk.

The Scholarships will be awarded on the result of the Second Term Examinations, which in the case of the Second year students will be in

- (a) Designing and Weaving,
- (b) Textile Colouring,
- and (c) Applied Ait; and in the case of Third year students in
  - (a) Designing and Weaving,
  - (b) Textile Colouring,
  - (c) Cloth Finishing,
- and (d) Applied Art.

Regard also will be had to the general progress candidates have made in their Theoretical and Experimental studies.

Applications from candidates for these Scholarships must be sent to the Registrar not later than January 31.

1901 Grimshaw, Norman Wilson, Stanley Ewart Ashley Brigg, Lawrence Heriot O'Flynn, James

1902 Mellor, Cecil Smith Duncan, Harold Gaunt, Frederick William Munro, William Thow

1903 Smith, Lister Rayner, Hafeld Kingsbury Hodgson Horsham, Wilfred Robert Beaumont, Frank

1904 Whitworth, Abraham Hart, Harry Leatham Horsham, Wilfred Robert Holloway, Joseph 1905 Mills, James Hart, Harry Leatham Bradley, Jim Broadbent, Lees

1906 Broadbent, Lees Cockcroft, Ernest Edward Mills, James Sutcliffe, Arthur Livsey

1907 Cockcroft, Ernest Edward Fairburn-Hart, George Stanley Wilson, James Blackburn

## V. ENTRANCE SCHOLARSHIPS

# I. Tenable in the Faculties of Arts, Science, and Technology

## Leeds City Council Scholarship

. This Scholarship as founded by the Council of the University, in 1892, out of the sum voted by the Leeds City Council.

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination. The Scholarship can be held only by students living with their parents or guardians resident in the City of Leeds.

The Scholarship is of the annual value of £50, and will be tenable, subject to the continuance of an adequate

grant by the City Council, for three years.

The Scholar will be required to pursue such a course of study in the University as shall, in the opinion of the Senate, constitute an effective preparation for a degree in Arts or Science of the University, or for the pursuit of some branch of industry, instruction in the principles of which is given in the University.

Leeds City Council Scholarships are not tenable by students who propose to enter, or who have already entered, on courses of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

Previously to 1906 this Scholarship was awarded after a special examination. It is now awarded on the results of the July Matriculation examination. Candidates are required to take higher papers in two subjects at this examination, at their own choice. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

## Emsley Scholarship

This Scholarship was endowed in 1886 by the late Thomas Emsley, Esq., of Burley-in-Wharfedale, who bequeathed £1,000 for the purpose of founding one or more Scholarships in the Yorkshire College.

<sup>1</sup> Scholarship divided.

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

There will, as a rule, be offered one Scholarship annually, of the value of £20, tenable for two years.

The Scholar will be required to pursue a course of study prescribed for a degree in Arts or Science of the University, or an alternative course in the Faculties of Arts, Science, and Technology, expressly approved by the Senate.

The Scholarship is not tenable in the Department of Textile Industries.

Previously to 1906 this Scholarship was awarded after a special examination. It is now awarded on the results of the July Matriculation examination. Candidates are required to take higher papers in two subjects at this examination, at their own choice. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

1887	Croft, Emily	1897	Oddy, Annie Maude
1888	Houfton, Ernest Henry	1898	Hunt, Arthur Douglas
1889	Hurst, Thomas Ockerby	1899	Robinson, Ethel Margaret
1890	Byles, William Esdaile	1900	Findlay, George Hindson
1891	Oyston, William Fletcher	1901	Landman, Samuel
1892	Jackson, Edwin	1902	Conyers, Hilda
1893	Bell, Ambrose John	1903	Bibby, Edward Ernest
1894	Barley, Bunten Archibald	1904	Brook, Annie
-	Hurd	1905	Leslie, May Sybil
1895	Corrie, William Edward	1906	Wigglesworth, Frank
1896	Christien, Alfred Eustace	1907	Claridge, Marjorie Muriel

## Edward Baines Scholarship

The Edward Baines Scholarships, founded in 1885, are established by the University in consideration of the sum of £3,000 which was raised to commemorate the public services of the late Sir Edward Baines. One-half of the sum annually devoted to this purpose is awarded by the University to candidates who have attended a Public Elementary School within the City of Leeds; the other half to such candidates as the Yorkshire Union of Educational Institutes shall, after examination, select. Particulars of the latter Scholarships may be obtained from the Secretary of the Yorkshire Union of Educational Institutes, South Parade, Leeds. (See also page 388).

Candidates for the Edward Baines (Day) Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination. They must have attended a Public Elementary School in the City of Leeds.

There will be offered in each year one Scholarship, of the value of  $\pounds$ , 20 a year, tenable for two years.

The Scholars will be required to pursue a course of study prescribed for a degree in Arts or Science of the University, or an alternative course in the Faculties of Arts, Science, and Technology, expressly approved by the Senate.

The Scholarship is not tenable in the Department of Textile Industries.

Previously to 1906 this Scholarship was awarded after a special examination. It is now awarded on the results of the July Matriculation examination. Candidates are required to take higher papers in two subjects at this examination, at their own choice. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

1886	Hutchinson, Herbert	1898	Stevenson, Ethel Mary
1888	Legg, Thomas Percy	1899	Savage, Hilda
1891	Dawson, Harry Medforth	1900	McKeand, MaggieWoodrow
1892	Parker, George Robert		Calam, Harold
1894	Hampshire, Florence	1902	Robinson, Lilian Dorothea
	Elizabeth	1903	Wilson, Florence Grey
1895	Warmington, Edith	1904	Hargreaves, Edith
1896	Scholes, Thomas Wilfrid	1905	Christie, John Hugh
1897	Westerman, Ethel	1906	Marsh, Frank Salton
			Guy, Ernest

## 2. Tenable in the Faculty of Arts Charles Wheatley Scholarship

This Scholarship was established by the University in 1903, in consideration of the sum of £1,500 given by the Misses Robinson of Mirfield and Mrs. Steele of Kettering, in memory of the late Charles Wheatley, Esq., of Mirfield. In case of equality of candidates, a preference is to be given to residents in Mirfield.

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

The Scholarship is of the annual value of £25, tenable for three years, and will be awarded as often as the funds at the disposal of the Trust admit.

The Scholar elected will be required to pursue a course of study at the University preparatory for the B.A. degree of the University.

Previously to 1906 this Scholarship was awarded after a special examination. It is now awarded on the results of the July Matriculation examination. Candidates are required to offer in this examination at least two languages, whether at the ordinary or at the higher standard, and to take higher papers in two subjects chosen from English Literature, History, Greek, Latin, French, and German. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

1904 Scholes, Katharine Louise
1905 Frank, Dorothea Ethel
1906 Batchelor, Edith

#### William Summers Scholarship

This Scholarship was founded by Mr. and Mrs. Buckley, of Ryecroft Hall, Audenshaw, near Manchester, in memory of William Summers, Esq., late M.P. for Huddersfield, and for many years a member of the Court of the Victoria University.

Candidates for this Scholarship must have been resident in the Parliamentary Borough of Huddersfield during one full year previous to the 1st of June of the year in which they compete, or must have attended a public school in the said Borough for the same period.

The Scholarship is of the annual value of £35 and is tenable for three years. Any accumulations of the Scholarship Fund will be expended by the Council as it may from time to time determine in prizes or exhibitions for candidates who shall have acquitted themselves sufficiently well in the examination without having obtained the Scholarship.

The successful candidate shall be required to pursue in the University of Leeds a regular course of study in one of the following Honours Schools: (1) Classics; (2) History; (3) English Language and Literature; (4) Philosophy; or any other Honours School in the Faculty of Arts, approved by the Senate. Such course shall be commenced in the October next after election to the Scholarship.

The Scholarship is awarded on the results of the July Matriculation examination. Candidates are required to offer in this examination at least two languages, whether at the ordinary or at the higher standard, and to take higher papers in two subjects chosen from English Literature, History, Greek, Latin, French, and German. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

1905 Hirst, John Crosland 1906 Dearnley, Charles 1907 Hobson, Julia

# 3. Tenable in the Faculties of Science and Technology

Brown Scholarships

These Scholarships were endowed in 1877 by the late Henry Brown, Esq., of Bradford and Rawdon, who bequeathed £5,000 to the Yorkshire College for the purpose of founding five or more Scholarships to be called the Brown Scholarships, for students attending the said College and receiving instruction in the various branches of those Sciences which are applicable to the Industrial Arts.

Candidates for these Scholarships must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

In general there will be offered in each year one or two Scholarships of  $\pounds_{40}$  a year, each tenable for two years, with power of extension. Applications for extension must be sent to the Registrar before the end of the second term.

A preference will be given, acteris paribus, to candidates who have declared their intention of entering some industry, instruction in the principles of which is given in the University, or of engaging in the teaching of Science. In the case of equality of candidates, a preference will be given to residents in Bradford or natives of Bradford.

Brown Scholars will be required to pursue a course of scientific or technical study which will qualify for a degree in Science, or for a diploma of the University, or otherwise to devote themselves, in a manner approved by the Senate, to the study of one or more branches of pure or applied science taught in the University.

Brown Scholarships are not tenable by students who propose to enter, or who have already entered, on courses of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

Previously to 1906 the Brown Entrance Scholarships were awarded after a special examination. They are now awarded on the results of the July Matriculation examination. Candidates are required to take in this examination higher papers in two subjects, of which one must be Mechanics including Physics), or Chemistry. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

	O O		,
1880	Senior, William Ottè	1893	Chapman, Harold Percy
	Skirrow, Benjamin Beck	1894	Dalton, John Edwin
1881	Overend, Wilkinson	1895	Leach, Èlsie
	Easterfield, Thomas Hill	,,	Robinson, Elizabeth Clare
1882	Courtice, George Robert	1896	Blackburn, William
	Aulton		Broughton
1883	Teanby, George William		Hincheliff, Joseph Henry
•	Alvey	1897	Forsyth, Christina Brand
1885	Marriner, William Wright		Hunt, Francis William
1886	Jennison, Francis Herbert	1898	Hummel, Alfred Roland
1887	Hartley, Thomas	•	Ure
1888	Mann, Harold Hart		Lodge, Harry Livingstone
	Parkin, Ernest	1899	Goodson, Ethel Elizabeth
1889	Smith, James Cowlishaw		Grimshaw, Norman
•	Cobb, John William	1900	Gough, Alfred
1890	Crouch, John Peachey	1901	Booth, Meyrick
	Norman, Frank Meade	1902	Armes, Henry Percy
	Peatfield, Albert Edward	-	Crosland, Percy Field
1891	Dewhirst, Wilfrid Arthur		Lord, William Ernest
-	Liversidge, Will	1903	Hodsman, Henry James
	French, James Wilson	1904	McGill, Ernest Arthur
	Duncan, John	1905	Barker, Christopher James
1892	White, Arthur Lee		Watson, James Arthur
,	Barber, John Watson	1906	Wood, George
	Conyers, James Reeve	1907	Lee, Élsie
	•		

## Akroyd Scholarships

These Scholarships, founded in 1875, are maintained by funds accruing from the Akroyd Trust, and are intended for the encouragement of the study of Natural Science.

Candidates for these Scholarships must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

In general there will be offered in each year one or two Scholarships of  $\pounds_{40}$  a year, each tenable for two years, with power of extension. Applications for extension must be sent to the Registrar before the end of the second term.

Women are not eligible to the Akroyd Scholarship.

Akroyd Scholars will be required to pursue such a course of study in the Faculties of Science and Technology, as shall, in the opinion of the Senate, constitute an effective preparation for a degree in Science or for a scientific calling.

Akroyd Scholarships are not tenable by students who propose to enter, or who have already entered, on a course of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

Previously to 1906 the Akroyd Entrance Scholarships were awarded after a special examination. They are now awarded on the results of the July Matriculation examination. Candidates are required to take in this examination higher papers in two subjects, of which one must be Mechanics (including Physics), or Chemistry. Applications from candidates for Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

Bothamley, Charles Herbert	1885	Duncan, William
Briggs, William	-	Watmough, Benjamin
Ingle, Herbert		Dains, Herbert Henry
Wilson, Albert Edward	1886	Hunt, Tom Harold
Atkinson, Thomas Francis		Ives, James Percy
Stables, William Herbert		Sykes, Einest
Taylor, Arthur	1887	Holmes, Harry Slater
Wright, Joseph		Booth, Frederick William
Allen, Harold Newman		Horrell, Ernest Charles
Hurtley, William Holdsworth	1888	Miall, Stephen
Wright, George Ward		Nicholls, Percy
Dibb, John Hustwick		Myers, John Ellis
Speak, Savannah Johnson		Sowry, George Herbert
Tucker, Clara	1889	Porter, John Fletcher
Hick, Herbert Edward		Sunderland, Arthur
Wilson, Edwin		Acott, Richard Harry
Fry, Ernest Bickersteth		Midgley, Harry
Moore, Ira	1890	Mitchell, Clifford
Wheelwright, Edwin		Archdeacon, William
		Henry
	1891	Holt, John Lupton
		Halliwell, Edward
Booth, Robert Davis	1892	Turton, Edward
		Brown, James Herbert
	Bothamley, Charles Herbert Briggs, William Ingle, Herbert Wilson, Albert Edward Atkinson, Thomas Francis Stables, William Herbert Taylor, Arthur Wright, Joseph Allen, Harold Newman Hurtley, William Holdsworth Wright, George Ward Dibb, John Hustwick Speak, Savannah Johnson Tucker, Clara Hick, Herbert Edward Wilson, Edwin Fry, Ernest Bickersteth Moore, Ira	Bothamley, Charles Herbert Briggs, William Ingle, Herbert Wilson, Albert Edward Atkinson, Thomas Francis Stables, William Herbert Taylor, Arthur 1887 Wright, Joseph Allen, Harold Newman Hurtley, William Holdsworth Wright, George Ward Dibb, John Hustwick Speak, Savannah Johnson Tucker, Clara Hick, Herbert Edward Wilson, Edwin Fry, Ernest Bickersteth Moore, Ira Wheelwright, Edwin Whitfield Pocklington, Henry Cabourn Thompson, George Robert

1893	Gough, William	1902	Brown, John Duncan
1894	Calvert, Harry Thornton	•	Hollins, Cecil
1895	Groocock, Henry Lloyd	1903	Harris, Marks Solomon
	Robinson, Harold	- "	Horsfall, Ronald Smith
1896		1904	Davies, Hamilton
1897	Middlemiss, James Ernest		Sinson, Israel Lewis
1898	Livesey, Charles Edwin	1905	Jenkins, Gilbert Ramsden
	Leonard		Marshall, Francis
1899	White, Herbert Leslie		Riley, Frank
1900	Scholefield, Fred	1900	Dudley, Harold Ward
	Willey, Edward		Hurst, Frank
1901	Radcliffe, Norman Brooke	1907	Rawling, Francis George
	Zortman, Israel Hyman		Varley, Gilbert

4. Tenable in the Faculty of Technology
Craven Scholarship

This Scholarship was established in the year 1887, by a number of the Engineers of Leeds, in recognition of the services rendered by the late Joseph Craven, Esq., to the Mechanical Engineering trades of the district.

Candidates for this Scholarship must not have been previously registered students of the University and must be under the age of nineteen years on the 30th of September

following the date of examination.

The Scholarship will be awarded triennially to the Engineering student who, having passed the Matriculation examination of the Joint Matriculation Board, has done best in the ordinary papers in Mathematics and Mechanics. It is of the annual value of £25 and is tenable for three years, subject to the conditions as to conduct and attendance laid down in the General Regulations applicable to all Scholarships. Not less than four-fifths of the value of the Scholarship is to be spent in fees. The balance will be paid to the scholar in cash.

Candidates must have been, previous to the day of examination, resident in the City of Leeds for a period or periods amounting together in the aggregate to at least five years, and be so resident at the time they present themselves for examination. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

1901 Frazer, Edgar Hamilton 1888 Banks, Arthur 1890 Perkin, Herbert 1903 Maddison, Wilfred Guy 1892 Hammond, Joseph Wetheril 1905 No award Millard, Frederick Stanley 1906 No award 1894 Sturgeon, Robt. Alexander 1907 Gerard, Inglis Joseph 1900 1900 Anderson, Robert

#### Tannett-Walker Bursaries

These Bursaries were instituted in 1900 by F. W. Tannett-Walker, Esq., of Leeds. A Bursary of £25 per annum, tenable for three years, is offered to holders of Scholarships or Free Studentships at the University of Leeds, who are preparing to follow the profession of an Engineer, under the following conditions:

- (1) The recipient must have attended a public elementary school in Hunslet at some period of his school career, although he need not have taken his University Scholarship directly from such school.
- (2) He must at the time of his election to the Bursary declare his intention of attending an approved course of education in the University for a period of not less than three complete sessions. This course will, as a rule, be that set out in the University Calendar as required for the degree of B.Sc. in Engineering of the University, either for an Ordinary or an Honours degree.

Mr. Tannett\*Walker offers one such Bursary in each year, so that if an election were made each year there might be three recipients of these Bursaries in the University at the same time.

In addition to these Bursaries, Mr. Tannett-Walker offers to take into the works of Messrs. Tannett-Walker & Co. Limited, Engineers, Hunslet, the Scholar who has passed successfully through his University course, on the same footing as a premium apprentice, without requiring any premium from him, but giving to him the same amount of wages as would be earned by an ordinary apprentice.

These Bursaries will not be awarded on the result of a special examination, but holders of Scholarships and Free Studentships, who have complied with the above conditions, are required to make application for them, by letter addressed to the Vice-Chancellor, as soon as possible after the elections to the Scholarships have been announced.

1900 Anderson, Robert 1904 McGill, Ernest Arthur

## William Cooke & Company Scholarship

This Scholarship was instituted in 1906 by Messrs. William Cooke & Co., of Sheffield.

It is of the annual value of £21, and is tenable for two years. It is awarded biennially.

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of the examination.

Candidates must be either (a) mining students articled to mining engineers, colliery managers, or colliery proprietors; or (b) persons who are actually employed underground at a colliery, or who have been employed underground for a period exceeding three years.

The Scholar will be required to pursue the course of study prescribed for the Diploma in Coal Mining, and to present himself, as soon as he is properly qualified, as a candidate for that Diploma, and also for the Colliery Manager's First Class Certificate of Competency to manage a Mine. He must attend this course regularly, and must take his examinations in the proper order and at the time laid down by the Regulations of the University.

The Scholarship will be awarded on the result of an examination in (1) English Composition; and (2) Mathematics (Arithmetic; Algebra, including quadratic equations; the Elementary Geometry of triangles, parallelograms, and circles, and of similar rectilinear figures), which two subjects are compulsory on all candidates; and also in one or more of (3) Mechanics; (4) Physics; and (5) Chemistry.

In 1908, the examination will be held about the middle of June. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

# 5. Tenable in the Faculty of Medicine Medical Scholarship

This Scholarship was instituted by the Leeds School of Medicine in 1888. It consists of free admission to the lectures and practical instruction covered by the composition fees for the complete M.B. course. The Scholarship will be awarded on the results of the July Matriculation examination. Candidates will be required to take in this examination higher papers in two subjects, of

which one must be Mechanics (including Physics), or Chemistry. Applications from candidates for these Scholarships on the prescribed forms must be sent to the Registrar not later than May 1.

Candidates must be under the age of nineteen years on the 30th of September following the date of examination. They must have declared their intention, if elected, of entering the University of Leeds as students in the Faculty of Medicine.

The successful candidate will be required to enter at the University of Leeds as a student in the Faculty of Medicine, in the October immediately following the examination, to pursue, at the University of Leeds and at the General Infirmary at Leeds, the curriculum for a medical degree in the University of Leeds: and to proceed to such degree. But should the successful candidate desire to take a degree in Science or a fuller course of scientific work, before entering upon his professional studies, he shall give immediate notice of his wish to the Senate, which may, if it so determine, allow the Scholar, after passing the First M.B. examination, to postpone his attendance in the School of Medicine for one year only, during which time he shall pursue such course of study at the University as the Senate may authorise.

Note. Up to 1905 this Scholarship was restricted to students who had passed the First M.B. examination (Victoria or Leeds), or the Preliminary Scientific examination (London) and was awarded on the results of an examination upon the subjects of the First M.B. examination (Victoria or Leeds).

		·
Houfton, Ernest Henry		Edmondson, Watts
Callum, Harold Sidney Hill	1901	Gough, Alfred
Greenwood, Henry Harold		<sup>1</sup> Booth, Sydney Herbert
Towse, Walter		<sup>1</sup> Rawlings, Harry
Field, Richard Cullingworth		Richardson
Turton, Edward	1903	Hamilton, William Douglas
Gough, William	1904	No award
Radcliffe, Percy Alexander	1905	No award
Hurst	1906	Little, Cuthbert Joseph
Coupland, James Alane		Harwood
Middlemiss, James Ernest	1907	Kirk, George William
Boyle, Alan		Lister
	Callum, Harold Sidney Hill Greenwood, Henry Harold Towse, Walter Field, Richard Cullingworth Turton, Edward Gough, William Radcliffe, Percy Alexander Hurst Coupland, James Alane Middlemiss, James Ernest	Callum, Harold Sidney Hill Greenwood, Henry Harold Towse, Walter Field, Richard Cullingworth Turton, Edward Gough, William Radcliffe, Percy Alexander Hurst Coupland, James Alane Middlemiss, James Ernest 1901 1902 1903 1904 1905 1906

<sup>1</sup> Scholarship divided.

## VI. SCHOLARSHIPS TENABLE AT EVENING CLASSES

#### Edward Baines Scholarships

For particulars of the institution of these Scholarships, see the Regulations for the Edward Baines Day Scholarships, page 378.

Scholarships not exceeding twenty in number are given annually in teaching and text books. Candidates' names must be sent to the Secretary of the Yorkshire Union of Educational Institutes, South Parade, Leeds, by the last day in August in each year.

Candidates for these Scholarships must have been members of some institution in the Union three months previous to the date of their candidature. They may be of either sex, but no teachers or assistant teachers are admissible. Candidates must be in circumstances to require free Scholarships.

The successful candidates will receive free instruction for one year, and will be provided with necessary text books.

#### VII. CITY AND COUNTY COUNCIL SCHOLARSHIPS

Scholarships are offered by the Leeds City Council and the County Councils of the North, East, and West Ridings of Yorkshire, tenable at the University of Leeds in common with other institutions, in scientific and technical subjects, including Agriculture. In the West Riding exhibitions are also offered in Coal Mining, and Free Studentships tenable at the University.

In certain cases assistance is offered to students in Evening Classes.

For further information apply as follows:-

For Leeds City Council Scholarships: The Secretary, Higher Education Department, Leeds City Education Committee.

For North Riding Scholarships: The Secretary, County Education Offices, Northallerton.

For East Riding Scholarships: The Clerk, East Riding County Council, Beverley.

For West Ricking Scholarships and Free Studentships: The Director, Education Department, County Hall, Wakefield.

#### VIII. ASSISTED STUDENTSHIPS FOR TEACHERS.

The Lords of the Committee of Council on Education pay three-fourths of the fees in the following Day classes, and one-half of those in the Evening classes, for a limited number of teachers engaged in science teaching.

Applications for this privilege must be made to the Secretary, Board of Education, South Kensington, not later than August 1 in each year.

## I. Day Classes

Chemistry: Any of the lecture courses, not exceeding two in number; laboratory instruction for not less than half a day per week.

*Physics*: Lectures and laboratory as above.

Electrical Engineering: Lectures and laboratory as above.

Zoology: The lecture courses, Elementary (including practical work), and Advanced.

Botany: The lecture coures, Elementary (including practical work), Advanced, and Agricultural (including practical work).

Biology: Laboratory, not less than one day per week: course in Nature Knowledge.

Mathematus: Any of the lecture courses, not exceeding two in number.

Agriculture: The lecture courses, first year (including practical work),
and second year (including practical work).

Agricultural Chemistry: Any of the lecture courses, not exceeding two in number. Laboratory instruction for not less than half a day per week.

## II. Evening Classes

Electrical Engineering: Any of the lecture coures, not exceeding two in number. Practical class.

For fees and other particulars of above classes see page 241, and following pages.

## IX. FORMER SCHOLARSHIPS, NOW DISCONTINUED

## Akroyd and Brown Senior Scholarships

Formerly part of the income of the Akroyd and Brown Scholarship funds was applied to the maintenance of Senior Scholarships, awarded after examination to registered students of the University, and tenable in the Faculties of Science and Technology, but the Senate resolved on May 15, 1905, to apply such income to the continuance of Scholarships originally awarded as Entrance Scholarships.

## Akroyd Senior Scholars

1882	Parkin, Alfred	1894	Wilson, Harold Albert
1883	Taylor, Arthur	•	Haworth, Frederic
1884	Wright, Joseph	1895	Rigby, William
1885	Speak, Savannah Johnson		King, Herbert
1886	Wilks, Stephen Longmore	1896	Calvert, Harry Thornton
	Butterworth		Jowett, Albert
	Wheelwright, Edwin Whit-		Tansley, George Edward
	field	1897	Storr, Bertram Vincent
	Courtice, George Robert		Cooper, Albert Henry
	Aulton	1898	Groocock, Henry Lloyd
1887	Hastings, Hugh	1898	Shepherd, Arthur Burton
1888	Stoney, William Walter	1899	Hunt, Francis William
1889	Ingle, Harry		Gawler, Robert
1890	Miall, Stephen	1900	Grant, Charles Henry
-	Mann, Harold Hart	,	Thompson, John Thomas
1891	Cobb, John William	1901	Denton, Ernest
1892	Archdeacon, William Henry		Gray, Arthur Lambert
1893	Wise, Julian Stanton	1902	Raper, Henry Stanley
75	Welpton, William Parker	1903	Zortman, Israel Hyman
	Guthrie, Thomas	1904	Phillipson, Abram
	Outility Amounts	. 904	rampson, amani

#### Brown Senior Scholars

00			
1880	Ingle, Herbert	1892	Davis, Frederick William.
	Passavant, Laura Maude		Daniel
1881	Wilson, Albert Edward		Marsland, Roland
	Armstrong, Wilhelmina	1893	Dawson, Harry Medforth
	Maria Vanientina	1093	
00.			Motley, Parker
1882	Senior, William Ottè	1894	Eurich, Hermann Oskar
	Stables, William Herbert	1895	Guthrie, Thomas
1883	Allen, Edgar Johnson	1896	Dalton, John Edwin
_	Ahrons, Ernest Leopold	1897	Broadbent, Francis James
1884	Potter, Arthur Edward		Skirrow, Frederick William
	Schmitz, Herman Emil	1898	Findlay, Mary Grace
1885	Dibb, John Hustwick	1899	Whiteley, Charles Edward
	Hurtley, William Holdsworth	1900	Chapman, Fitzroy Tozer
1886	Pocklington, Henry Cabourn	-	Unwin, Ernest Ewart
	Thompson, George Robert	1901	Hummel, Alfred Roland
1887	Duncan, William	- ,	Ure
•	Thorp, Walter		Stoddard, Arthur Askwith
1888	Sykes, Ernest	1902	Dell, John Alexander
1889	Watson, Frank Leslie	, , , ,	Goodson, Ethel Elizabeth
1890	Nicholls, Percy	1002	
1090		1903	Calam, Harold
	Myers, John Ellis		

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#### X. PRIZES

#### Gladstone Memorial Prize

The Trustees of the Gladstone Liberal Memorial Fund have established Gladstone Memorial Prizes to be given in books at the Universities and University Colleges in England, Scotland, and Wales for special proficiency in History, Political Science, and Economics. An annual prize of the value of  $\pounds_5$  has been offered to and accepted by the Council of the University, and will be awarded under the following conditions:

- 1. The prize will be awarded for an Essay on some subject connected with History or Political Science or Economics.
- 2 It will be open to competition among all students of Day Classes of the University who are in attendance upon University lectures for not less than four hours per week.
- 3. No student who has once obtained the Prize may compete a second time.

The Essay must be sent in to the Professor of History not later than the end of September.

1902 Savage, Hilda, B.A. 1903 Davis, William Hathaway, B.A. 1905 Butterworth, George William 1906 Findlay, Sarah Kennedy

#### Leblanc Medal

The Leblanc Memorial Committee presented the Victoria University with a portion of the surplus from the fund raised in France for the erection of a statue of the distinguished chemist, Nicolas Leblanc, the amount to be devoted to the encouragement of the study of Chemistry. On the foundation of a separate University in Leeds a share of the fund was vested in the University of Leeds.

A bronze medal will be awarded to the candidate in the Final examination in the Honours School of Chemistry, who, having been placed in the first or second class, shall be recommended by the Examiners for distinction in Technological Chemistry or Metallurgy.

1891 Ingle, Harry 1898 Skirrow, Frederick William 1892 Mann, Harold Hart 1905 Davies, Arthur Hugh

392 Prizes

## Thorp Prizes in Forensic Medicine and Hygiene

These prizes, amounting altogether in value to the sum of fifteen pounds, were instituted by the late Dr. Disney L. Thorp, one of the original founders of the Leeds School of Medicine, and are awarded at the close of every third term, in accordance with such regulations as may be made from time to time.

#### In Forensic Medicine

	Gough, William, B.Sc. Cundall, Edward		Shacksnovis, Reuben Heppenstall, Clement
1902	Boyle, Alan		Hoyle
1903	No award	1907	Dunbar, Dean
1904	Parkinson, Alfred Howard		

#### In Public Heaith

1900	Radeliffe, Adolphus Harold	1904	No award
1001	Braithwaite, Leonard Ralph	1905	Hamilton, William Douglas
1902	Tomlin, Herbert	ð001	No award
1903	Legge, James Huntly	1907	No award

#### Thorp Prize Essay

A sum of fifteen pounds is offered every three years for an essay or original research on some subject connected with Forensic Medicine or Public Health. The competitors must have attended in the University of Leeds all the courses necessary to qualify for degrees or diplomas in Medicine, and must have received their degree or diploma not more than three years before the competition. The scope and nature of the essay or research may be either physical, chemical, microscopical, physiological, clinical or statistical, but its subject must have received the approval of the Board of the Faculty of Medicine one year before the award is made. The successful essay or paper with the drawings and specimens by which it may be illustrated will become the property of the University. The prize will next be awarded in October, 1907.

#### Hardwick Prize in Clinical Medicine

This prize, of the value of ten pounds, is given annually on a competition which begins on the third Monday in May. Candidates must have been students in the School of Medicine of the University of Leeds for not less than eight

Prizes 393

terms; they neust be attending the medical practice of the Leeds Infirmary; and they must have held or be then holding the office of Clinical Clerk in that Institution.

1900Willans, Charles Rudolph1904Tomlin, Herbert1901Saville, Edwin1905Gough, Alfred1902Coupland, James Alane1906No award1903Matthews, Crawfurd Tait1907No award

#### McGill Prize in Clinical Surgery

This prize, of the value of ten pounds, is given annually on a competition which takes place in the month of May. Candidates must be students in the School of Medicine of the University of Leeds who have not at the time of the examination entered on their sixth year, and who have held at the Leeds Infirmary the following appointments: -Casualty dresser, out-patient and in-patient dresser, ophthalmic dresser, in-patient and out-patient medical clerk, post-mortem clerk, and gynecological clerk.

1900Gough, Wilham1904Briedey, Wilfred Edward1901Keeling, Hugh Neville1905Gough, Alfred1902Coupland, James Alane1906No award1903Braithwaite, Leonard Ralph1907No award

## Scattergood Prize

This prize, instituted in memory of the first Dean of the Medical Department, Yorkshire College, is awarded annually to the most distinguished student in the class of Obstetrics. The value of the prize, which consists of books or instruments, is five pounds.

1900Acomb, John1904No award1901Coates, Richard1905Hamilton, William Douglas1902Tomlin, Herbert1906Heppenstall, Clement Hoyle1903Smailes, Herbert William1907Thoseby, John NormanLonsdale

#### Gold Medal

A Gold Medal of the value of ten pounds, formerly presented by the Treasurer, and since 1901 by the Faculty of the Infirmary, is awarded on the collated results of the prize examinations in the following subjects:—(1) Surgery; (2) Medicine; (3) Pathology; (4) Obstetrics (Scattergood Prize); (5) Forensic Medicine (Thorp Prize); (6) Clinical Medicine (Hardwick Prize); (7) Clinical Surgery (McGill Prize); (8) Gynæcology; (9) Public Health (Thorp Prize); (10) Pharmacology and Therapeutics; (11) Practical Surgery;

(12) Ophthalmology; (13) Mental Diseases. To qualify for the Gold Medal the candidate must have attended all his final classes, i.e., must have completed and not have exceeded his fifth year of study, and must present four prizes or their equivalent. Should a student desire to spend an additional year antecedent to the study of the subjects in part ii in preparing for a Science degree, Honours, or the Primary Fellowship of the Royal College of Surgeons of England, such time need not be counted as one of the five years. Of these prizes one must be either the Surgery or the McGill Prize, and another either the Medicine or the Hardwick Prize.

1900	Gough, William, B.Sc.	1904	No award
1901	Saville, Edwin	1905	Gough, Alfred
1902	Coupland, James Alane	1906	No award
1903	No award	1907	No award

#### Silver Medal

The Junior Medal (Silver) is awarded upon the results of the prize examinations in the following subjects:—(1) Junior Anatomy; (2) Senior Anatomy, (3) Physiology; (4) Practical Physiology (including the experimental portion of part ii); (5) Materia Medica; that is to say, upon the subjects of the second year and the first and second terms of the third year in the "Normal Course." To qualify, the candidate must obtain two prizes or their equivalent.

1900	Coupland, James Alane Braithwaite, Leonard Ralph Boyle, Alan Gough, Alfred	1905	No award Hamilton, Mitchell, Carter	
1903	No award	1907		

#### Class Prizes

Book prizes and Certificates of Honour are given in the various classes in the School of Medicine at the end of each session.

## SCHOLARS AND EXHIBITIONERS, 1907

University	v (English) (Modern	Date of Election 1907	Walker, Jessie
,,	`	1907	Fairley, Barker Thorp, Hilda
,,	(Chemistr,)	1907 1907	Cross, William Ernest Davies, Hamilton

• •	• ,	Date of Election	•
University (Electric Engineer	icai vrino\	1907	Shuttleworth, Newton
1851 Exhibition		1907	Armes, Henry Percy, B.Sc.
" "	••	1907	Hodsman, Henry James, B.Sc.
Salt		1906	Gill, William Conrad
Leighton		1906	Hogan, Kathleen
,,		1907	Everett, Percy Newton
,,		1907	Marsh, Frank Salton
,,		1907	Turner, Frederick William
Clothworkers' Tex	tile	1907	Cockcroft, Ernest Edward
11, ,,		1907	Fairburn-Hart, George
			Stanley
,, ,,		1907	Wilson, James Blackburn
Leeds City Counc	il	1905	<sup>2</sup> Simpkiss, Nellie
,, ,,		1905	<sup>2</sup> Webster, Herbert William
11 11		1906	Bannister, Albert
,, ,,		1907	Brodie, Morris
Charles Wheatley		1905	Frank, Dorothea Ethel
,, ,,		1906	Batchelor, Edith
William Summers	·	1905	Hirst, John Crosland
		1906	Dearnley, Charles
), w		1907	Hobson, Julia
Brown .		1905	<sup>1</sup> Barker, Christopher James
		1905	Watson, James Arthur
**		1906	Wood, George
,,		1907	Lee, Elsie
Akroyd		1904	<sup>1</sup> Sinson, Israel Lewis
,,		1905	<sup>1</sup> Jenkins, Gilbert Ramsden
•••		1905	<sup>1</sup> Marshall, Francis
•••		1905	<sup>1</sup> Riley, Frank
,,		1906	Dudley, Harold Ward
,,		1906	Hurst, Frank
,,		1907	Rawling, Francis George
,,		1907	Varley, Gilbert
Emsley .		1906	Wigglesworth, Frank
		1907	Claridge, Marjorie Muriel
39			The same and the s

<b>7</b> 1		Date of Election	<b>36</b> 3 13 3	(1.1.	
Edward Be	unes	 1906	Marsh, Frank	c Salton	
**		 1907	Guy, Ernest		
Craven		 1907	Gerard, Ingli	s Joseph	
Medical		 1902	Booth, Sydne	ey Herbert	
,,		 1902	Rawlings, Har	rry Richards	on
,,		 1906	Little, Cuth	bert Josep	ρħ
			Harwood		
,,		 1907	Kirk, Geor	rge Willia	m
		•	Lister	-	
Infirmary		1901	Rawlings, Har	rry Richards	on
••		1902	Pickles, Willi	iam Normar	1
,,		1906	Fisher, John	Barugh	
		1007	Sinson, Juliu	s Barnet	

#### GRADUATES OF THE UNIVERSITY OF LEEDS

(The names of deceased graduates are printed in stalics)

## Honorary Graduates

## Doctor of Laws

1904 Lady Frederick Cavendish
The Archbishop of York
The Duke of Devonshire
The Earl of Harewood
Viscount Cross
Lord Herries
Lord Allerton
The Right Honourable
Arthur Herbert Dyke
Acland
Sir Francis Sharp Powell,
Bart., M.P.
Sir John Barran, Bart.

1904 Sir Charles Hubert Hastings Parry, Bart. Alexander Campbell Mackenzie Sir Charles Villiers Stanford Sir Edward Elgar Sir William Bousfield Henry Walford Davies George Charles Milnes Gaskell Charles Wood Lord Wenlock 1906 Sir Owen Roberts

## Doctor of Letters

1904 Sir Albert Kaye Rollit Alfred Austin Andrew Martin Fairbairn 1904 Joseph Wright 1906 The Bishop of Ripon Sir Charles Holroyd

## Doctor of Science

1904 The Earl of Rosse
Lord Kelvin
Lord Airedale
Sir Isaac Lowthian Bell,
Bart.
Sir William Henry Breadbent, Bart.
Sir Arthur William Rucker
Tempest Anderson
Jonathan Hutchinson
John Hughlings Jackson
Louis Compton Miall
Arthur William Mayo
Robson

1904 Thomas Pridgin Teale Thomas Edward Thorpe Claudius Galen Wheelhouse Sir William Henry Perkin 1900 Thomas Clifford Allbutt Heinrich Caro Alfred Grandidier Albın Haller Edwin Ray Lankester Carl Theodor Liebermann Carl Alexander von Martius Paul Pelsencer Heinrich Rubens Herbert Hall Turner

Master of Arts
1906 Thomas Percy Sykes

398 Graduates

## Graduates

## Faculty of Arts (including Commerce and Law)

## Master of Arts

1907	Bibby, Edward Ernest	1906	McKeand, Maggie Woodrow
1905	Chapman, Maude (Briggs)	1907	Molland, Theodora Mary
1907	Conyers, Hilda	1907	Naylor, Nellie Noble
1906	Davis, William Hathaway	1907	Neville, Ethel May
1907	Frank, Sarah	1907	North, Fanny Caroline
1907	Hand, William Thomas	1905	Robinson, Ethel Margaret
1907	Hastings, Margaret	1905	Savage, Hilda
1907	Holmes, Carrie	1907	Smith, Egerton
1907	Illingworth, Maria Emma	1906	White, Ethel
1907	Towett, Jessie	1997	Whitehead, Mary
1907	Kitchener, Ernest Fdward	1906	Wilson, Florence
1907	Landman, Samuel	1905	Wilson, George William
	•		• • • • • • • • • • • • • • • • • • • •

## Bachelor of Arts

	1741/11/107	0) 11	743
1906	Anderson, John	1907	Fairley, Barker
1905	Armitage, John Henry	1907	Findlay, Sarah Kennedy
1906	Armstrong, Lilias Eveline	1907	Flynn, Bridie
1906	Ashburner, Frederick	1905	Fox, Arthur Cunlifte
1905	Atkinson, Janet	1905	Foggitt, Emma
1905	Barras, Elsie Clara	1906	Gale, Florence
1906	Bartle, Ida	1905	Garside, Bertha
1905	Bishop, Sarah Ellen	1905	Gascoigne, Evelyn May
1905	Blackburn, Elizabeth Maria	1907	Gill, William Conrad
1906	Boardman, Ernest Edmund	1905	Gray, Arabella Hyde Janet
1906	Bradley, Florence Margaret		Ethel
1905	Braithwaite, William Dalston	1905	Gray, Catherine Isabella
1905	Brigham, Fanny Muriel	1907	Greening, Edward Baptist
1907	Brown, Constance Mabel	1905	Gunnell, Doris
1906	Butterworth, George William	1905	Hepworth, Frank
1905	Burgess, Lillie	1905	Hepworth, Minnie
1905	Burley, Leo Le Gay	1905	Hield, Esther Margaret
906	Chapman, Harry Garfield	1905	Hirst, Miriam
1905	Chard, Edith Annie	1905	Hitcham, Charlotte Elsie
1905	Dalton, John Edwin	1907	Hodges, Raymond John
1906	Darycott, Ernest Jenkinson	1905	Holgate, Jane
1906	Daykin, John Bertram	1905	Holmes, Ethel
1905	Denby, Maurice	1905	Howarth, Fred
1905	Dickinson, Frederick Walter	1905	Hurst, Thomas Ockerby
1906	Dixon, Elizabeth	1906	Jackson, Mabel
1905	Dobson, Constance	1906	Jackman, Elizabeth
1907	Donaldson, Lawrence	1907	Langstaff, Bilton, B.Sc.
	Richard Leverton	1907	Lea, George William
1905	Easterfield, Thomas Hill	1906	Lidbetter, James Staples
1905	Edwards, Maud Mary	1906	Linforth, Edith Mary
1905	Elliott, Spencer Hayward	-	Elizabeth
1905	Fairbrother, Jessie	1905	Lister, Martha

1905 1906 1906 1906 1906 1905 1907 1905 1905 1905	Maccoby, Sarah Judith Martin, Alice Walford Matthews, Felix Hackett Maud, Ida Marian Mitchell, Margaret Mitchell, Myra Moulden, John William Mountain, Eliza Nicholson, Ethel Outram, Edith May Owen, Florence Parnaby, Margaret Ellen (Hudson) Perfect, Douglas	1905 1905 1907 1906 1907 1906 1907 1906 1905	Sheard, Dora Sheard, Mary Beatrice Skinner, Mabel Southern, Alfred Collingwood Spencer, Frances Mary Elvira Storey-Bates, William Edward TenBruggenkate, George Herbert Thorp, Hilda Townsend, Florence Emma Turner, Harriet Marie Walker, Ada
1905 1907 1905 1905 1906 1905 1905 1906 1907 1906	Porritt, Florence Mary Poynton, Lucy Ellen Precious, Julia Hopper Raven, Hilda Mary Rider, Martha Hannah Ridge, William Sheldon Robinson, Lilian Dorothea Rogers, Hannah Rogers, Violetta Scholes, Katharine Louise Scruton, Harriett Annie Scruton, Kate Ellen	19c7 1905 1905 1906 1905 1905 1907 1906 1906 1905 1905	Walker, Jessie Walker, Julia Beatrice Walker, Julia Beatrice Wallace, Harry Bruce Warnes, Sarah Catherine Waterhouse, Osborn Watson, George Alston Weatherell, Thomas Bertram White, Arthur Ernest Wilson, Florence Grey Wilson, Selina Ethel Wood, Jessie Graham Wrigley, Isaac
	Bachelor	of L.	ares
1907 1905 1906 1905	Brayshay, Stanley, B.A. Lee, Edmund McConnell, John William Robson, William Newby	1906 1905 1906	Scott, Hubert Edward Sykes, James Wade, James Mervyn
	Faculties of Science	e and	Technology
	Doctor of	of Scie	rnce
1907 1907 1905 1905	Dawson, Harry Medforth Denison, Robert Peckett Dwerryhouse, Arthur Richard Frankland, John Naylor	1905 1905 1907 1905	Ingle, Harry Mann, Harold Hart Standing, Herbert Fox Varley, William Mansergh
	Master o	of Sci	ence
1905 1906 1905 1906 1907 1905 1906	Agat, Herbert William Andrews, William Allen Barker, Aldred Farrer Beaumont, Roberts Beeley, Arthur Bennett, Hugh Garner Bevan-Lewis, William Bothamley, Charles Herbert Brayshay, Maurice William	1905 1907 1905 1906 1905 1907 1905	Briggs, Samuel Henry Clifford Brown, Walter Henry Calam, Harry Thornton Clapman, Thomas William Cooper, Albert Henry Cooper, William Arthur Copley, Frederick

1906	Coulson, Alfred	1907	Lister, Mary Florence Grace
1907	Davies, Arthur Hugh	1905	Littlewood, Harry
1905	Dent, Frankland	1907	Morrison, James Alexander
1905	Edwards, Ernest John		Shepherd
1905	Findlay, Mary Grace	1905	Motley, Parker
1905	Fry, George Cccil	1905	Norminton, Harold
1906	Garaner, Walter Myers	1905	Parr, George Dudley
1907	Gaunt, Rufus		Aspinall
1905	Gawler, Robert	1905	Procter, Henry Richardson
1905	Goodman, John	1905	Raper, Henry Stanley
1905	Grant, Charles Henry	1907	Richardson, John Stocks
1905	Green, Arthur George	1905	Skirrow, Frederick William
1905	Hammerton, Jonas	1900	Slater, John Henry
1905	Hetterd, Charles Nelson	1907	Smailes, Alan
1907	Hodsman, Henry James	1905	Thompson, John Thomas
1907	Horsfall, Ronald Smith	1907	Thorp, George
1905	Hummel, John James	1907	Townsend, Robert
1905	Jackson, Harry Percival	1907	Turner, Florence Mary
1907	Jordan, Albert		Beatrice
1905	Jowett, Albert	1906	Unwin, Ernest Ewart
1905	Kendall, Percy Fry	1905	Walker, Henry Secker
1907	King, Charles Arthur	1905	Whiteley, Charles Edward
1905	King, Herbert	1905	Wright, Charles James
1905	Kirby, Frederick Oscar		

## Bachelor of Science

	Danne	iy .n	10 711 6
1905	Ackroyd, John Prest	1905	Bulman, John Arthur
1905	Allen, Lilian	1905	Burgess, William Ernest
1906	Anson, Emily	1907	Cameron, James Neild
1905	Appleyard, John Hemy Ross	1906	Carlton, George Westerdale
1905	Armes, Henry Percy	1000	Clandge, Margaret Elsie
1906	Armes, Jane Prue	1905	Cobb, John William
1907	Ashby, William Ewart	1906	Cooper, John George
1907	Baddiley, James	1905	Coxon, Lawrence Adams
1905	Barlow, Percival Smith	1905	Craig, David
1905	Barton, Edith Beatrice	1905	Crawshaw, Annie
1907	Bell, Herbert Nuttei	1905	Crosfill, John
1907	Bibby, Joseph Richard	1906	Crosland, Percy Field
1907	Birkhead, Florence Ethel	1907	Cross, William Ernest
1905	Booth, Meyrick	1906	Crowther, Herbert
1907	Bowes, George Robert	1907	Crowther, William Edmund
1905	Boyd, Simeon	1905	Cunningham, Jean Orme
1905	Brier, Albert	1905	Davies, Ivor Parry
1905	Briggs, William, M.A.,	1907	Davies, Hamilton
, ,	Cantab.	1905	Denbigh, George James
1905	Brittain, Charles Edward,	1905	Dickmson, Cyril
	M.Sc., Vict.	rgoó	Draper, Alick Darby
1905	Broadhead, James Aithur	1905	Dudley, James
1906	Broadley, William	1906	Dudley, Nora
1907	Brook, Annie	1906	Elliott, Bertram Warren
1905	Brook, Harry	1905	Ellis, James John

1906	Ellis, John Newman	1905	Langstaff, Bilton
1905	Everett, James Herbert	1907	Law, Marion Rosalind
1905	Fearnley, Lewis William	1905	Livesey, Charles Edwin
	Knapton		Leonard
1906	Field, Margaret	1905	Lodge, Harry Livingston
1905	Finn, Cornelius Philip	1905	Lord, William Ernest
1907	Fletcher, Alfred Edgar	1905	Lowson, William
1905	Forsyth, Christina Brand	1907	Loyd, Jessie
1907	Frank, George Herbert	1905	McCandlish, Douglas
1905	Gaut, Robert Charles	1905	McCiae, Mary Walbrand
1905	Goddard, Clara Annie	-	(Bruce)
1905	Gomersall, Ernest Edward	1907	McGill, Ernest Arthur
1905	Grant, Frederick Ernest	1907	Maddison, Wilfred Guy
1905	Greenwood, Arthur	1905	Manasseh, Antonius Joseph
1907	Gregg, Herbert Atkinson	1905	Marriner, William Wright
1905	Gregory, Frederick Maurice	1905	Marsden, Ernest Vane
1905	Gunter, John Henry	1905	Marshall, Herbert
1905	Haler, Percy James	1905	Marshall, Joseph
1905	Hampshire, Florence Lliza-	1905	Mellor, Fred
	beth	1905	Morris, Florence Annie
1006	Hansell, John Bentley	1905	Morton, Dora
1905	Harding, Oswald Jackson	1905	Moss, Charles Edward
1905	Hardy, Joseph	1905	Murphy, Harold Newton
1907	Hargreaves, Edith	1906	Myers, Mary Alice
1905	Hartley, Percival	1905	Nicholls, Percy
1905	Hefford, George Winfield	1905	Oddy, Annie Maude
1005	Heptinstall, Richard	1906	Outram, Nora Aline Jane
1005	Hield, Mary Elsie	1905	Owen, Samuel Joseph
1905	Hilary, Daisy	1905	Peacock Arthur
1905	Hirst, Henry Reginald	1906	Pearce, Cyril Thomas
1905	Hobart, John William	1905	Phillipson, Abram
1905	Hobley, Robert Arthur	1905	Pocklington, Henry Cabourn
1906	Holgate, Edward		B.A., Cantab., D.Sc.,
1905	Hummel, Alfred Roland Ure		Lond.
1907	Hummel, Ernest Lonsdale	1906	Procter, Herbert
1905	Hunt, Francis William	1907	Raistrick, John William
1905	Hunter, Herbert	1905	Rankin, William Munn
1905	Huttley, William Holds-	1905	Rayner, Herbert Emmett
, ,	worth	1007	Rider, Charles Matthew
1905	Hutchinson, Florrie	1900	Ross, William Oatey
1905	Hutton, Wilfred	1906	Rydall, George Herbert
1905	Ingle, Herbert	1905	Scholefield, Fred
1905	Jackson, Arthur	1906	Schmitz, Herman Emil
1907	Jackson, Colm Gyrth	1905	Scouller, Walter Daly
1905	Johnson, John William	1905	Scruton, Harold Adams
• ,	Haigh	1905	Shacksnovis, Reuben
1905	Kay, Douglas John	1905	Shorter, Sydney Alfred
1905	Kaye, Edward Percy	1907	Shuttleworth, Newton
1905	Knowles, George William,	1907	Sinson, Israel Lewis
- 403	M.A., Royal Univ., Irel.	1905	Skirrow, Benjamin Beck
1907	Lacy, Aithur	1905	Smith, Henry Archbold
- 7~1		. 703	The state of the s

1905 1905 1905	Sowerbutts, Edith Utley Standing, Edwin Mortuner Stead, Frank Cawthron	1905 1905 1905	Wagstaffe, George William Waite, Joseph Harold Wallank, Wilfrid Stephen
1905	Stewart, Tom	1905	Walker, Joshua
1905	Stocks, Arthur	1900	Ward, Margaret Naomi
1905	Studley, Charles Wilcock	1906	Warin, Phillipson
1907	Sutcliffe, James	1905	Warmington, Edith
1907	Sykes, Albert Howarth	1905	Whaley, James
1905	Taylor, Francis	1905	White, Robert George
1905	Thompson, George Robert	1905	White, William Henry
1905	Thompson, Hubert	1905	Whitchead, Pollie
1905	Thorp, Samuel	1905	Whittaker, Croyden
1905	Thorp, Walter		Meredith
1905	Tiffany, Frank	1907	Wilkinson, Eltoft Wray
1905	Tiffany, Joseph Edgar	1905	Wilson, Frances Annie
1907	Tomlinson, John Arthur	1905	Wise, Julian Stanton
1906	Tomlinson, Thomas Fowler	1905	Wood, Margaret
1907	Turner, Frederick William	1905	Zortman, Israel Hyman

## Faculty of Medicine

## Doctor of Medicine

1906	Anderson, William Jenkins Webb	1905	Stoney, William M.D., Vict.	Walter,
1905	Parkinson, Arthur Stanley	1903	Turton, Edward	
	Bachelor of Medicine of	and B	achelor of Surge	<b>7</b> 7'

	-		
1905	Bailey, Fred	1905	Greenwood, Charles Henry
1907	Bibby, James Paley	1905	Greenwood, Henry Harold
1905	Birtwhistle, Frederick Percy	1905	Greenwood, William
- /- 3	Hewetson	- ) - 3	Osborne
1905	Boyle, Alan	1906	Hackworth, Vivian Cuthbert
1905	Braithwaite, Leonard Ralph	1905	Hayes, Frederick William
1905	Brierley, Wilfred Edward	1905	Hopton, Ralph, M. D., Lond.
1905	Broadley, John	1906	Hummel, John James, M.Sc.
1905	Brown, Henry	1905	Hustler, George Herbert
1906	Crawford, James Stirling	1905	Kellett, Alfred Featherstone
1905	Cundall, Edward	1906	Kendall, Frank Edward
1905	Darlow, Francis	1905	Ladell, Robert George
1905	Deane, Arthur Maslen		Macdonald
1907	Dibb, William Land	1905	Legge, James Huntly
1905	Dixon, Robert Garside	1905	Lister, Thomas Edmund
1906	Dobson, Francis George	1906	McKane, William Oliphant
1905	Eames, Charles William	1905	Mackenzie, Alexander,
1905	Fearnley, Harold	_	M.A., Cantab.
1906	Flint, Ethelbert Rest	1905	Macvean, Herbert James
1906	Gloyne, Stephen Roodhouse	1905	Matfin, Harry
1905	Gough, Alfred	1905	Manknell, Arthur
1905	Greaves, Frederick Villiam	1905	Matthews, Crawfurd Tait
. •	Marshall	1905	Moorhouse, Charles Herbert
			•

1906 1906	Morton, Aemitage Radcliffe, Roland Brooke Reed, Ernest William Reed, John Arthur	1905 1906 1906	Tomlin, Herbert Trumper, Oscar Bagster Walker, Albert Latimer Walker, Melville George
1905	Seaton, Douglas	1905	Leslie
1905	Smailes, William Herbert	1905	Wells, George Lee
	Smith, Charles Nixon		Whalley, Frederick
1905	Spink, Ernest William,	-	Whitehead, Thomas
	M.D., Lond.	1905	Wilks, Stephen Longmore
1905	Stansfield, Harry		Butterworth, M.D., Lond.
1905	Stott, William Atkinson	1905	Willans, Charles Rudolph
1905	Suggit, Bertram	1906	Williamson, Joshua
1005	Todd, Aldred Bertram	-	. •

#### DIPLOMAS (UNIVERSITY OF LEEDS)

Slingsby

#### Education

1905 Barton, Edith Beatrice, B.Sc.
1906 Conyers, Hilda, B.A.
Edwards, Maud Mary, B.A.
Owen, Florence, B.A.
Robinson, Lilian Dorothea, B.A.
1907 Claridge, Margaret Usie
Dunlop, Marian Vaughan
Illingworth, Maria Emma
Myers, Mary Alice
Outram, Nora Olive Jane
Whitchead, Mary

#### Commerce

1904 Whiting, John Roland 1906 Potts, Roland Beeton

#### Teachers of French

1907 Crowther, Jane Elizabeth Woodman, Hilda

#### Teachers of German

1907 Oates, Marion

## Mechanical Engineering

1905 Wharton, John

## Electrical Engineering

1904 Foulds, John Rhodes 1905 Chippindale, Isaac Muriay Hamilton, James 1906 Richardson, Thomas Brook

#### Coal Mining

1904 Frazer, Edgar Hamilton Paterson, George Stewart Willey, Edward

#### Dyeing

1906 Sen, Gopal Chundra 1907 Dawson, Walter Marchant, Ernest Norman

#### Leather Manufacture

1904 Casaburi, Vittorio
Doikawa, Saichiro
Prévôt, Jules Mathieu
1906 Feldheim, Herman Dietrich Ernst
Mende, Stephan
1907 Blyth, James Rupert

Hardie, Alexander Greenhorn Morrison, James Alexander Shepherd, M.Sc.

# UNIVERSITY OF LEEDS FELLOWS, SCHOLARS, AND PRIZEMEN

(See pages 367-396.)

# VICTORIA UNIVERSITY FELLOWS, SCHOLARS, AND PRIZEMEN (YORKSHIRE COLLEGE STUDENTS)

# University Fellowships

1899	Stuart, Wilson	Arts
1900	Stuart, Wilson	Arts
1901	Whiteley, Charles Edward	Science

# University Scholarships

	omitority continuity	
1898	Stuart, Wilson	Philosophy
1899	Cooper, Albert Henry	Physics
	Dwerryhouse, Arthur Richard	Geology
	Varley, William Mansergh	Physics
1900	Braithwaite, Leonard Ralph	Medicine
•	Denison, Robert Beckett	Chemistry
1902	Stelfox, Sydney Herbert	Engineering
-	Stoddard, Arthur Askwith	Engineering
1903	Raper, Henry Stanley	Chemistry"
19041	Waterhouse, Osborn	English
	Zortman, Is ael Hyman	Physics
		-

<sup>1</sup> Victoria University of Manchester.

#### Derby Scholarship

1899 Frankland, John Naylor

### John Bright Scholarship

1897 Stuart, Wilson

1899 Hartley, Harold (prizeman)

1906 Waterhouse, Osborn

#### Mercer Scholarship

1901 Dakin, Henry Drysdale

#### Leblanc Prize

1891 Ingle, Harry

1892 Mann, Harold Hart

1898 Skirrow, Frederick William

#### UNIVERSITY OF LEEDS HONOURS SCHOOLS

#### Classics

1906 Class I Bibby, Edward Ernest

Butterworth, George William

Class 2 Ashburner, Frederick

" Matthews, Felix Hackett

Ten Bruggenkate, George Herbert

1907 Class 2 Hodges, Raymond John

# English Language and Literature

1905 Class I Gascoigne, Evelyn May Holmes, Carrie

Class 2 Conyers, Hilda

1907 Class I Walker, Jessie

Class 2 Moulden, John William

# Modern Languages and Literatures

1905 Class 1 Edwards, Maud Mary Gunnell, Doris

1906 Class 2 Hastings, Margaret

,, Illingworth, Maria Emma

Class 3 Whitehead, Mary

1907 Class 1 Fairley, Barker 1

,, Thorp, Hilda ²

# History

1906 Class 2 Wilson, Florence Grey

1907 Class I Findlay, Sarah Kennedy

Class 2 Gill, William Conrad

<sup>1</sup> Distinguished in French and German,

<sup>2</sup> Distinguished in German.

#### Mathematics

1905 C	ass 2	Phillipson,	Abram
--------	-------	-------------	-------

Class 2 Smailes, Alan 1907

> Class 3 Ashby, William Ewart

#### **Physics**

Mellor, Fred Class 1 1905

Sykes, Albert Howarth 1907 Class 1 Townsend, Robert

,,

#### Chemistry

Class 1 1905 Armes, Henry Percy Bennett, Hugh Garner ,,

Davies, Arthur Hugh Class 2 Crosland, Percy Field

Class 3 Booth, Meyrick

McCandlish, Douglas ,,

Morrison, James Alexander Shepherd

Class 1 Hodsman, Henry James Horsfall, Ronald Smith 1906

Class 2 King, Charles Arthur

Class 1 Cross, William Ernest 1907 Davies, Hamilton

> Class 2 Jackson, Colin Gyrth

#### Botany

Class 2 Turner, Florence Mary Beatrice 1905

# Physiology

1905 Class 1 Lord, William Ernest

Class 1 Crowther, William Edmund 1907

# Geology

1906 Class 1 Jordan, Albert

# Engineering

Class 1 Gregory, Frederick Maurice 1905 Class 3 Owen, Samuel Joseph

1906 Class 1 Holgate, Edward

Richardson, John Stocks Class I 1907 McGill, Ernest Arthur

#### Electrical Engineering

Class I Shuttleworth, Newton 1907 Class 2 Wilkinson, Eltoft Wray

# Colour Clemistry and Dyeing.

Baddiley, James Class 1 1907 Class 2 Frank, George Herbert

# VICTORIA UNIVERSITY HONOURS SCHOOLS (YORKSHIRE COLLEGE STUDENTS)

#### History

1891	Class 2	Stables, William Herbert
	Class 3	Taylor, Frank Edward
1900	Class 2	Scholes, Thomas Wilfrid

#### 1904 Class 2 Scholes, Thomas Wilfid 1904 Class 2 Davis, William Hathaway

# English Language and Literature

1904<sup>1</sup> Class 1 Waterhouse, Osborn Class 2 Denby, Maurice

,, Elliott, Spencer Hayward ,, Hepworth, Frank

#### Modern Languages and Literatures

1902 Class 2 Robinson, Ethel Margaret ,, Stevenson, Ethel Mary

1903 Class 2 Mann, William Edward Wormald

19041 Class I Airey, Millicent

Class 2 Dodgson, Sarah Alice Class 3 Raven, Hilda Mary

#### Philosophy

1898 Class I Stuart, Wilson

#### **Mathematics**

1899 Class I Frankland, John Naylor 1900 Class 2 Findlay, Mary Grace

#### **Physics**

1897 Class 2 Hammerton, Jonas 1899 Class 1 Cooper, Albert Henry Varley, William Mansergh 1900 Class 1 Shorter, Sydney Alfred

1901 Class 1 Grant, Charles Henry

Class 2 Copley, Frederick

Class 3 Andrews, William Allen

1902 Class 2 Denton, Ernest Oates, James Holroyd

Class 3 Goodson, Ethel Elizabeth

1903 Class 2 Thorp, Samuel

19041 Class I Phillipson, Abram

# Chemistry

1891 Class 1 Ingle, Harry

1892 Class I Mann, Harold Hart

1893 Class 1 Dent, Frankland

Class 3 Archdeacon, William Henry

<sup>1</sup> Victoria University of Manchester.

1895	Class 2	Fry, George Cecil
	,,	Guthrie, Thomas
	Class 3	Hirst, Henry Reginald
0.6	,,,,,	King, Herbert
1896	Class 1	Sugden, John Henry
	Class 2	Brittain, Charles Edward
	(1/)	King, Arthur
- C., m	Class 3	Watson, Herbert Wood
1897	Class I	Wilson, Harold Albert
. 6.6	Class 2	Harrison, William Hudson
1898	Class 1 Class 2	Skirrow, Frederick William
		Calvert, Harry Thornton Storr, Bertram Vincent
1S99	Class 2	Dobson, William Henry Noel
1900	Class I	Denison, Robert Beckett
14,00	Class 2	Shepheid, Arthur Burton
1901	Class 1	Dakin, Henry Drysdale
.,	•,	Whiteley, Charles Edward
	Class 2	Gawler, Robert
1902	Crass 1	Briggs, Samuel Henry Clifford
	,,	Grant, Frederick Ernest
	,,	Taylor, Francis
1902	Class 2	Gaunt, Rufus
•	,,	Norminton, Harold
	,,	Redfern, Herbert Stanley
	,,	Thompson, John Thomas
	Class 3	Coxon, Lawrence Adams
1903	Class 1	Raper, Henry Stanley
	.,,,,	Scholefield, Fred
	Class 2	Ellis, James John
	Class 3	Rhodes, Edwin
19041	Class 1	Gatecliff, John
	**	Hartley, Percival
	,,	Marshall, Joseph
	Class 2	Zortman, Israel Hyman Calam, Harold
		Chadwick, Percival Wager
	,,	Radcliffe, Norman Brooke
	Class 3	Barton, Edith Beatrice
	· · · · · · · · · · · · · · · · · · ·	Geology
1808	(1)	
1898	Class I	Jowett, Albert
1899	Cans I	Dwerryhouse, Arthur Richard
		Zoology
1901	Class 1	Standing, Herbert Fox
1903	Class 2	Dell, John Alexander
		Physiology
1897	Class 2	Forsyth, John Andrew Cairns
1901	Class 3	Hu mnel, John James
- /		

<sup>1</sup> Victoria University of Manchester

# Engineering

1891	Class 1	Nicholls, Percy
1893	Class 2	Davis, Frederick William Daniel
1896	Class 2	Hefford, Charles Nelson
1897	Class 2	Oddy, James
),	,,	Tansley, George Edward
1898	Class 2	Corrie, William Edward
	Class 3	Priestman, Harold
1899	Class 1	Linskill, William Arthur
,,	Class 2	Groocock, Henry Lloyd
	Class 3	Hutton, William Austin
1900	Class I	Mann, Ernest Edward
	Class 2	Ballardie, George de Cavnoth
•	,,	Pearson, Robert John Addison
1902	Class 1	Stelfox, Sydney Herbert
•	,,	Stoddard, Arthur Askwith
	,,	Wetherall, Arthur
1902	Class 2	Cryer, Edward
-	Class 3	Kirby, Frederick Oscar
1903	Class 3	Brayshay, Maurice William
- 0	,,	Slater, John Henry
	,,	Tennant, Norman Scholefield

# Honours at M.B. and Ch.B. Examinations

1894	Class 2	Seaton, Douglas
	• • •	Trumper, Oscar Bagster
1895	Class 1	Ligertwood, Charles Edward
	Class 2	Shaw, John Vincent
	٠,	Trotter, Robert Hale
1896	Class 2	Rowling, Samuel Thompson
1897	Class 2	Moorhouse, Charles Herbert
	٠,	Taylor, Frank Edward
1898	Class I	Trotter, Edward
	Class 2	Spong, Ambrose
	,,	Turton, Edward
1899	Class 2	Hime, Henry Charles Rupert
	,,	Illingworth, William Arthur
	,,	Morton, Armitage
1901	Class 2	Saville, Edwin
1903	Class 1	Braithwaite, Leonard Ralph
, ,	Class 2	Steele, Percy Kingsley
1904	Class 2	Boyle, Alan
, ,	,,	Tomlin, Herbert

## First Classes at Final LL.B. Examination

1902 Sykes, James 1903 Jessop, Frederick Hubert

<sup>1</sup> Victoria University of Manchester.

#### UNIVERSITY OF LEEDS

#### EXAMINATION LISTS

(September, 1906-July, 1907)

# Faculty of Arts (including Commerce and Law)

#### M.A. Examination

Latin and English -- Smith, Egerton Latin and French -- Jowett, Jessie - Landman, Samuel - Molland, Theodora Mary French and German History -North, Fanny Caroline

Examinations for B.A. Degree with Honours Classics -- Class 2. Hodges, Raymond John English Language and Literature - . - Class 1. Walker, Jessie Class 2. Moulden, John William Modern Languages and Literature -Fairley, Barker 1 · Class I. Thorp, Hilda<sup>2</sup> - Class 1. History . Findlay, Sarah Kennedy Class 2. Gill, William Conrad

#### Ordinary B.A. Final Examination

Div. T. Div. 2.

Prest, Adeline Blanche

Brown, Constance Mabel Donaldson, Lawrence Richard Leverton Flynn, Bridie Greening, Edward Baptist Langstaff, Bilton, B.Sc. Outram, Edith May Poynton, Lucy Ellen Scholes, Katherine Louise Southern, Alfred Collingwood Storey-Bates, William Edward Weatherell, Thomas Bertram

# Separate Subjects at Final Standard for Ordinary B.A.

Abrahams, Solomon (e) (h) Bentley, Hannah Grimshaw (e) (1) Mansell, Francis Henry (1) Charlesworth, Alice (e) (1) Cowling, Alice Beatrice (e) (1) Horsfall, Jessy Evelyn (e) (1)

Howe, Grace Alice (c) (1) Pearson, Eunice (e) (1) Winter, John Edgar (/)

1, Part I. (1) English Literature (Subsidiary).
(h) European History (Subsidiary). (e) Education, Part I.

G Distinguished in French and German.

<sup>&</sup>lt;sup>2</sup> Distinguished in German.

#### B.A. Intermediate Examination

September, 1906 (Old Regulations) Anderton, Louisa

#### New Regulations

Bentley, Hannah Grimshaw Horsfall, Jessy Eveline

Howe, Grace Alice Mansell, Francis Henry

#### June, 1907 (New Regulations)

Cawthron, Edwin Croft, Alice Mary Dean, Arthur Ernest Gendall, Philips Parsons Watkins Peel, Albert Hand, Harry Aram Hopkins, Eric Arthur Klamborowski, Wilfred Stephen

Martin, Thomas Haigh Matthews, Basil Wilfred Ostrehan, Arthur Clement Henry Rennard, Thomas Ambler

Rennic, William Heron Maxwell

Ward, Alice Rose

#### LL.B. Final Examination

Div. 2. Brayshay, Stanley, B.A.

#### LL.B. Intermediate Examination

Dir. 2.

Croft, Thomas Lister Daiches, Salom Fisher, Arthur Samuel

# Diploma for Teachers of French.

Second Examination Crowther, Jane Elizabeth Woodman, Hilda

First Examination Lavington, Mabel Jessie Coustie, Jessie Spink, Gertrude Annie

# Diploma for Teachers of German.

Second Examination Oates, Ethel Marion

# Diploma in Education

Claridge, Margaret Elsie Dunlop, Marian Vaughan Illingworth, Maria Emma Myers, Mary Alice Outram, Nora Aline Jane Whitehead, Mary

# Faculties of Science and Technology

#### Doctor of Science

Dakin, Henry Drysdale Dawson, Harry Medforth Standing, Herbert Fox

#### M.Sc. Examination

Chemishy - - - - - - - Kay, Douglas John
Botany - - - - - - Lister, Mary Florence Grace
Rankin, William Munn

#### Examinations for B.Sc. Degree with Honours

Mathematics - - - Class 2. Smailes, Alan Class 3. Ashby, William Ewart Physics - - - - Class 1. Sykes, Albert Howarth Townsend, Robert Chemistry - - - Class 1. Cross, William Ernest

Davies, Hamilton

Class 2. Jackson, Colin Gyrth

Physiology - - - Class 1. Crowther, William Edmund

Mechanical Engineering - Class I. McGill, Ernest Arthur Electrical Engineering - Class I. Shuttleworth, Newton Class 2. Wilkinson, Eltoft Wray

Colour Chemistry and Dyeing Class 1. Baddiley, James Class 2. Frank, George Herbert

# Ordinary B.Sc. Final Examination

Div. 1. Bowes, George Robert Fletcher, Alfred Edgar Loyd, Jessie Maddison, Wilfred Guy Div. 2.
Bell, Herbert Nutter
Bibby, Joseph Richard
Birkhead, Florence Ethel
Brook, Annie
Cameron, James Neild
Gregg, Herbert Atkinson
Hargreaves, Edith
Lacy, Arthur
Law, Marion Rosalind
Raistrick John William
Sinson, Israel Lewis
Sutcliffe, James
Tomlinson, John Arthur
Turner, Frederick William

# Separate Subjects at Final Standard for Ordinary B.Sc.

#### In Principal Subjects

Barker, Christopher James  $(m)^2$ Fort, Morris  $(c)^2$ Jenkins, Gilbert Ramsden (r) Rhodes, Norman (c) Watson, James Arthur (m) Woodhead, Arthur Edmund (c)

(m) Mathematics. (c) Chemistry.

#### In Subsidiary Subjects

Armitage, Harry (e) (p)
Beckwith, Kathleen Mary (e) <sup>2</sup>
Blockey, John Reginald (p)
Burras, Catherine (e) <sup>2</sup>
Crowther, Philip Townsend (m) <sup>2</sup>
Davies, Hamilton (m)
Ebbage, Edith Mabel (e) (p)
Farnish, John (e)
Gilchrist, David (m e) <sup>2</sup>
Goddard, Ethel Mary (e) (b) <sup>2</sup>
Hinckley, Arthur (e) (p)
Holroyd, Eleanor Mary (e) <sup>2</sup>

Leslie, May Sybil (m) (p)
Mann, James William (e) (m)
Platts, Matthew George (m)
Riley, Frank (m) (p)
Smart, William (e)
Thornton, Edwin (p)
Tunnicliffe, Eveline Mary (e) (p) 2
Watts, Frank Maxfield (e) (m)
Webster, Herbert William (e)
West, William Ernest (c) (g) 2
Willbourn, Horace Haynes (p)

(e) Education. (m) Mathematics. (p) Physics. (l) Chemistry. (b) Botany. (m e) Mechanical Engineering. (g) Geology.

#### B.Sc. Intermediate Examination

September, 1906 (Old Regulations)

Crowther, Herbert <sup>3</sup> Henton, Meanwell <sup>3</sup> Maddison, Wilfred Guy Mulcahy, Julia Smith, Bracewell <sup>3</sup> Wilson, Ella Beaumont <sup>3</sup>

## (New Regulations)

Beckwith, Kathleen Mary Crowther, Philip Townsend Ebbage, Edith Mabel <sup>2</sup> Farnish, John Holroyd, Eleanor Mary Peacock, Oswald Raper <sup>3</sup>

#### Candidates under Special Regulations (Passed as Honours Candidates only)

Dixon, Frank Metcalfe Seymour-Jones, Arnold Passed in Essay

Seymour-Jones, Arnold - Passed in Inter. Science Willbourn, Horace Haynes - Passed in Additional Subject

Frank, George Herbert 4 - Passed in Additional Subject and Essay

#### June, 1907 (New Regulations)

Addison, Herbert <sup>1</sup>
Appleyard, Ada Evelyn <sup>1</sup>
Armin, Edwin Bates <sup>1</sup>
Arnold, Joseph Sykes <sup>1</sup>
Aslin, John Theodore <sup>1</sup>
Bannister, Albert <sup>1</sup>

Bendrey, Hilda <sup>1</sup> <sup>2</sup> Carter, Frederick Edward <sup>1</sup> Colbert, Thomas Henry <sup>1</sup> Coope, Hilda <sup>1</sup> Crosby, Berkley Cecil <sup>1</sup> Cundall, Leonard Bertram <sup>1</sup>

<sup>1</sup> Passed in Essay also.

<sup>2</sup> Passed in Additional subject of Intermediate Standard also.

<sup>3</sup> Passed in Additional subject at a previous examination.

<sup>4</sup> Passed Intermediate as Honours candidate only at a previous examination.

Dixon, James Harvey <sup>1</sup>
Dudley, Harold Ward <sup>1</sup>
Dugdale, Norris <sup>1</sup>
Fielden, Harold <sup>1</sup>
Greenwood, Edward Joseph Bennal <sup>1</sup>
Greonwood, Edward Joseph Bennal <sup>1</sup>
Read, Balfour Roberts, Augu Hardisty, Victoria Lavinia Hurst, Frank <sup>1</sup>
Johnson, Charles Lester <sup>1</sup>
Lonsdale, James Herbert <sup>1</sup>
Ward, Herber Ward, Herber Ward, Frank Marsh, Frank Salton <sup>1</sup>
Willott, Ernes Wood, George Woodmansey, Morton, Gordon <sup>1</sup>

Mountain, Frank®
Parr, Thomas Alfred
Parsons, Ernest 2
Prince, Ben 1
Read, Balfour
Roberts, Augustus Alphonso 1
Simpson, Guy 1
Stroud, Clifford John Reginald 1
Thornton, Harold 1
Walker, Frank Arthur 1
Ward, Herbert Wainwright
Wilby, Arthur Edwin
Willott, Ernest Spencer 1
Wood, George 1
Woodmansey, Arnold 1

Addional Subject and Essay only

Halford, John Charles Weir, James Norman

Additional Subject only September, 1906 Sutcliffe, James \*

June, 1907

Bearder, Ernest Arthur \* Fottrell, Edward Joseph \*

Haworth, Richard <sup>4</sup> Seymour-Jones, Arnold <sup>6</sup>

Essay only

Bagenal, Philip Hope Edward Barrett, Norman Kenyon Bayley, John Henry Stewart Feather, Myra Graham, Hugh Colborne Lisle, Clemens Platts, Matthew George Walker, Emily Fatrington Westerman, Mabel

# **Diplomas**

Dyeing - -

- Dawson, Walter Marchant, Ernest Norman

Leather Manufacture - -

- Blyth, James Rupert Hardie, Alexander Greenhorn Morrison, James Alexander

Shepherd, M.Sc.

<sup>1</sup> Passed in Essay also.

<sup>2</sup> Passed in Additional subj t of Intermediate Standard also.

<sup>4</sup> Passed Intermediate examination in a previous Session.

<sup>5</sup> Passed Intermediate as Honours candidate only at a previous examination.

# Faculty of Medicine

#### Doctor of Medicine

Anderson, William Jenkins Webb

#### Final M.B. and Ch.B. Examination

December, 1906

Part II

Hackworth, Vivian Cuthbert McKane, William Oliphant Reed, Ernest William Whitehead, Thomas

March, 1907 Part I

Frobisher, James Hebblethwaite Martin

Mitchell, Guy Annesley Carter Nicol, George Colin Henderson

July, 1907

Part I

Part 1

Butler, William Harold Vallow, Harold Part II Bibby, James Paley Dibb, William Land

#### Second M.B. and Ch.B. Examination

March, 1907

Part II

Perlman, Archie

Musson, John Percy Piercy, Bernard Charles Riley. Arthur Shaw, William Smith, Reginald Eccles Thoseby, John Norman Lonsdale

July, 1907

Part I

Brown, Charles Suffield Sharpe, Claudius Galen Kave Part II
Brown, John Perrin
Elliott, Fhomas
Fisher, John Barugh
Hart, Walter Sidney
Lamb, Harold Victor
Mitton, Norman Vernon
Slocombe, Bernard Atkinson
Stockdale, George Vincent
Twist, Norman Stuart

#### First M.B. and Ch.B. Examination

September, 1906
Part I
Elliott, Thomas
Hart, Walter Sidney

June, 1907

Part 1 Caplan, Harry Dunbar, Leslie

Ingham, Harold Norman

Little, Cuthbert Joseph Harwood

Macvie, George Ernest Robinson, William Sinson, Julius Barnet Walker, John Perry

Walker, Thomas Lockwood

Wigglesworth, Frank

Bushell, Neville Caplan, Harry Dunbar, Leslie Elhott, Thomas

Little, Cuthbert Joseph Harwood

Part 11

Macvie, George Ernest Robinson, William Sinson, Julius Barnet Walker, John Perry Walker, Thomas Lockwood

Wigglesworth, Frank Wood, Bertram William Francis

#### Diploma in Public Health

July, 1906.

October, 1906.

Part I-Halliwell, Thomas Oates Part II-Halliwell, Thomas Oates

July, 1907

Scatterty, William Sharpe, George Augustus

# Diploma in Dental Surgery (L.D.S.)

June, 1907.

Preliminary Examination in Science

McKay, George Simpson

First Professional Examination

July, 1907

Howden, Ernest Wilson, Francis Cecil

#### REGISTERED STUDENTS

#### Session 1906-7

# Faculties of Arts (including Commerce and Law), Science and Technology

Balden, John Whiteley

Abrahams, Solomon Ackroyd, William Addison, Frank Addison, Herbert Ahmad, Sheikh Ansaruddin Albrecht, Cyril V. Alexander, Walter William Algar, William James Alguersuari, Ramon Allott, Effic Gwen Ament, Robert Anderton, Louisa Andrews, William Edward Appleby, Edgar Ingham Appleyard, Ada Evelyn Appleyard, Fred Appleyard, John Armes, Jane Pine, B.Sc. Armin, Edwin Bates Armitage, Harry Armitage, Leonard Armitage, Richard Armitage, Samuel Reginald Cecil Armitage, Sarah Arnold, Joseph Sykes Arrowsmith, Elsic Ascough, Henry Percival Randolph Ashby, William Ewart Aslin, John Theodore Asquith, George Asten, Walter Atkinson, John Roland Ayre, Ethel

Bacon, Frederick Stanley Baddiley, James Bagenal, Philip Hope Edward Bailey, Annie Rosa Baines, Gilbert

Baldwin, Ewart Vernon Bannister, Albert, L.C.C. Scholar Barber, Edith Grace Barker, Christopher James, Brown Scholar Barker, Irene Barker, Robert William Barran, Rowland Noel Barret, Edward Barrett, Norman Kenyon Barritt, Alice Elizabeth Barron, William Cecil Batchelor, Edith, Charles Wheatley Scholar Batley, Richard Clarkson Battle, Alfred Ernest Bauer, Noah Bayley, John Henry Stewart Beakbane, Henry Bean, Bevis Heppel Bean, Kenneth Dobing Bearder, Ernest Arthur Beare, William Lawrence Beaumont, John Beecroft Becker, John Edward Beckwith, Kathleen Mary Bedford, George Smith Beecroft, Philip Beilby Bendrey, Hilda Bentley, Hannah Grimshaw Bentley, Harold Rawbert Bentley, Zia Berry, Donal Bewlay, Thomas Henry Bibby, Joseph Richard Bickersteth, John Burgon Binns, Charles Henry Birkhead, Florence Ethe

Bishop, Sarah Ellen, B.A. Blackburn, George Blackmore, Harry Blair, Ethel Mary (Mrs.) Bland, Robert Neilson Blockey, John Reginald Bloxam, William Popplewell, B.Sc. Blyth, James Rupert Boggett, Esther Norton Booth, Harold Gordon Bowes, George Robert Bramley, John Robinson Clarkson Branson, Frederick Hartridge àBrassaid, Heibert Frederick Richard Oswald Brayshay, Stanley, B.A. Brigg, Gerald Francis Briggs, Margery Haining Briggs, Roland Hunter Bright, George Broadbent, Lees, Clothworkers' Textile Scholar Brook, Annie Brooke-Wynn, Regmald Charles Brown, Charles Brown, Constance Mabel Brown, Florence Margaret Brown, James Thomas Brumfitt, Chflord Burgess, Joseph Henry Burley, Edith Burras, Catherine Burrows, Joseph Thomas Bushell, Neville Calvert, Granville A. Calvert, Reginald Cullen Cameron, James Nield Caplan, Harry Carpenter, Victor Charles Douglas Boyd Carreno, Manuel Joseph Carter, Frederick Edward Cawthron, Edwin Chalker, Henry Cecil

Chapman, Harry Garfield, B.A.

Chattapadhaya, Nolini Mohan

Claridge, Margaret Elsic, B.Sc.

Charlesworth, Alice

Chippindale, Oswald

Cheavin, Harold Squire

Clarke, Charles Dougan Clarke, Thomas Clay, Charles Bernard Clayton, Frank Clayton, Reginald Fitzrov Clayton, William Fitzrov Clegg, Lillian Maud Clough, Norman John Cockcrott, Ben Dixon Cockcroft, Charles Cockcroft, Ernest Edward, Clothworkers' Textile Scholar Cohen, Alexander Colbert, Thomas Henry Cole, George Albert Convers, James Reeve Coope, Hilda Cooper, Frederick Scott Couchar, James Cowling, Alice Beatrice Crawshaw, Nellie Crawshaw, William Cridland, Dorothy Croft, Alice Mary Croft, Thomas Lister Crosby, Berkley Cecil Croskell, Austm Cyril Cross, William Urnest, L.C.C. Free Student Crowther, Herbert Crowther, Jane Elizabeth Crowther, Philip Townsend Crowther, William Edmund, 1. C.C. Croxon, Annie Croysdale, James Cundall, Leonard Bertram Curtis, Kenneth Samuel Daiches, Salom

Davies, Hamilton, Akroyd Scholar Davies, Henry Dawson, Walter Daykm, John Bertram, B.A., B.Sc., A.C.C. Free Student Dean, Arthur Ernest Deane, Frances Mary Dearnley, Charles, William Summers Scholar Dixon, Frank Metcalfe Dixon James Harvey Dockray, Alfred
Dodds, J. Allison
Dolan, Stephen Ormond
Donald, Amy
Donaldson, Laurence Richard
Leverton
Doody, Ellie
Doria, Victorino Planas
Downend, George Frederick
Dudley, Harold Ward, Akroyd
Scholar
Dugdale, Norrs
Dunlop, Marian Vaughan
Durrant, Aubrey Percy

Eames, Herbert Ebbage, Edith Mabel Edwards, Annie Ellis, Harold Ellis, Leonard Eric Kensett Ellis, Rowland Holliday Ellison, Joseph

Fairburn-Hart, George Stanley Fanley, Barker Farnell, Henry Leigh Farnish, John Feather, Myra Feather, Samson Fenner, Joseph Henry Ferguson, Alice Teresa Ferrey, Cuthbert Edmund Caulfeild Fielden, Harold Findlay, Sarah Kennedy, L.C.C. Free Student Firth, Mary Louisa Fish, Fred Herbert Fisher, Arthur Samuel Fleming, John Fletcher, Alfred Edgar Flint, Frederic Samuel Floyd, Eric Gaskell Flynn, Bridie Foord, Lawrence Barnard Fort, Morris Fottrell, Edward Joseph Foulds, Thomas Frank, Dorothea Ethel, Charles Wheatley Scholar Frank, George Herbert Fyfe, Alan Dacre

Gaille, Edouard Garland, Geoffrey Garlick, Hannah Garnett, Brian James Henry Garratt, Herbert Edward Gaunt, Rufus, B.Sc. Gee, Silas Gibson, John Maughan Gilchrist, David Gill, William Conrad, Salt Scholar Gilliat, Harold Gittleson, John Godby, Hilton Wooldridge Goddard, Edith Eleanor Goddard, Ethel Mary Golding, Mary Muriel Gomez, Hector Gomez, Ricardo Goodbody, Joshua Eric Goodson, Arthur Godfrey Gordon, Stephen Jefferson Gould, Sarah Graham, Hugh Colborne Greaves, Elizabeth Greaves, Regmald Harry Greaves, Samuel Sowray Green, Harry Stanley Green, Horace Sidney Greener, Kenneth Woodfal Greenhalgh, John Greening, Edward Baptist Greenway, Thomas Charles F. Greenwood, Edward Joseph Bernal Greenwood James Gregory, Eric Oxspring Grisdale, William Groocock, Helena Grove, Thomas Groves, Winnified Halliday Grundy, Geoffrey Stewart Gundill, Edward Norman

Haigh, John Henry Haley, George Arthur Haley, Mary Beatrice Halford, John Charles Hampshire, Charles Herbert Hampson, William Robert, junr., Mus. Bac. Hanson, Charles Edward Hardie, Alexander Greenhorn

Hardisty, Victoria Lavinia Hardman, Thomas Victor Hare, Herbert Hargraves, Henry James Hargreaves, Edith Harper, William Harrap, Emma Nettleton Harrison, Clifford Harrison, Edward Harrison, Herbert Spencer Harrison, John Henry Hart, Albert Hartley, John Thomas Hartmann, David Stewart Harvey-Loutit, John Haslewood, William Haworth, Richard Hayes, David Richie Healey, William Henderson, Matthew Henton, Meanwell Hepton, Charles Herzog, Isaac Heughan, Cecil John Hewson, Frank Richard Hicks, John Sykes Hiley, Thomas William Hill, James Howard Hinckley, Arthur Hine, Frank Hine, Noel Austin Wade Hirst, John Crosland, William Summers Scholar Hirst, Oswald Hobson, Elsie Irene Hobson, Kathleen Hodges, Raymond John Hodgson, Herbert Hodsman, Henry James, University and Brown Scholar Hogan, Kathleen, Leighton Scholar Holborn, Isabel Holden, Athole Frederick Holdroyd, Frank Victor Hollingworth, William Robert Holmes, Harold Edwin Holmes, Joseph Holroyd, Eleanor Mary Hopkins, Eric Arthur Horn, Florence Horn, Fred

Horne, Arnold Cecil
Horsfall, Jessy Eveline
Horsfall, Ronald Smith, Akroya
Scholar
Howden, Edward
Howe, Grace Alice
Hoyle, Francis Sharpe
Hsu, Hoon Yu
Hudson, Isabel
Humphreys, Percy Harry Illingworth
Hurst, Frank, Akroyd Scholar
Hutchings, Arthur William
Hutchinson, Raymond Whitworth
Hutchinson, Teasdale Hilton
Hutton, Florence

Illingworth, Maria Emma, B.A., L.C.C. Free Student Irvin, Arthur Edward

Jackman, Elizabeth, B.A.
Jackson, Colin Gyrth
Jarvis, Albert
Jarvis, Julia Anne
Jenkins, Gilbert Ramsden, Akropd
Scholar
Jervis, Thomas Francis
Johnson, Charles Lester
Johnson, Mary Whiteley
Jordan, Thomas Stephen
Lowett, Jessie, B.A.

Kelly, Walter Aloysius Dovle Kendall, Ernest James Kendall, Percy Fry Kennedy, Douglas Stewart Kerr, George Francis Keswick, Joseph Daniel Leonard Kidd, William Killen, Thomas Bradley Kinder, Fred King, Percival Edgar, Dyeine Scholar Kirby, Oswald Farquhar Kitchen, William Croysdale Kitson, Nellie Klamborowski, Wilfrid Stephen Knowles, Geoffrey

Lacy, Arthur, Leighton Scholar

Landman, Samuel B. A. Lane, Algernon Roland Lang, Frederick Murray Langstaff, Bilton, B.Sc. Lavington, Mabel Jessie Law, Marion Rosalind Laycock, George Frederick Lea, George William Leadley, Edith Emma Lee, Craven Lee, Harry Lancelot Leslie, May Sybil, Emsley Scholar Lisle, Clemens Lister, Mary Florence Grace, B.Sc. Little, Cuthbert Joseph Harwood, Medical Scholar Lloyd-Jones, Norman Lock, John Lockwood, Charles Henry Lockwood, John Beaumont Longbottom, Nellie Lonsdale, James Herbert Loyd, Jessie Lucas, Lucy Charlotte Lupton, Anne Muriel Lupton, Arthur Michael Lupton, Elizabeth Marion Lyles, Cecil Thomas

Mackay, George Simpson Macvie, George Ernest Mahony, Ernest Mallinson, Dorothy Mann, Arthur Mann, James William Manning, Paul Mansell, Francis Henry Marchant, Ernest Norman Margetts, Percy Alexander Marr, Henry Norrison Marsh, Frank Salton, Edward Baines Scholar Marshall, Francis, Akroyd Scholar Martin, Thomas Haigh Mason, William Fidler Maud, Ida Marian, B.A. Maude, Arthur Percy Lees Mawson, John Halliwell McGill, Ernest Arthur, Brown Scholar McLean, Patrick

Mellors, Clarissa Florence Horsley Merckens, Otto Midgley, Mary Blanche Wearmouth Midgley, Wilson Miller, Rose Mary Milligan, Cecil Cooper Mills, James, Clothworkers' Textile Scholar Milner, George Loxley Milner, James Milnes, Orlando Barlow Mitchell, John Arnold Mitchell, Mary Annie Moncayo, Rafael Morrell, Frank Morris, David Griffiths Morris, Mary Dorothy Morrogh, Dominick Morton, Gordon Mosby, Isabella Stanley Moulden, John William Mountain, Frank Moxon, William Heald Mulcahy, Julia Mulcahy, Lena Murgatroyd, Tom Murphy, Bertha Mary Murphy, Grace Louisa Myers, Marion Myers, Mary Alice, B.Sc.

Naylor, Alice Maud Naylor, George Naylor, Harry Naylor, Paul Neumann, Walter Noble, Edward Normington, May North, Fanny Caroline, B.A. Nowell, Joseph

Oates, Ethel Marian Ostrehan, Arthur Clement Henry Otter, Lucy Outram, Edith May Outram, Nora Aline Jane, B.Sc.

Palmer, Margaret Elizabeth, B.A. Parke, Edward Parker, Stephen Parkin, Edward

Parr, Thomas Alfred Parsons, Ernest Partridge, John Kenneth Patchett, Elsie Peacock, Oswald Raper Peam, Ferdinand Pearson, Eunice Pedley, Francis Leonard Peel, Albert Pell, Albert Edward Penty, George Victor Perkins, Saiah Elizabeth Peters, John Cecil Pickles, John Jagger Pinder, John Pitts, William Edward Platts, Matthew George Platts, Walter Leslie Pollock, Charles Albert Poppleton, Bernard Eyre Potts, Roland Beeton Poustie, Jessie Poynton, Lucy Ellen Prest, Adeline Blanche Pridham, Charles Albert Prince, Ben Pullan, Charles Purchas, Arthur William

Raistrick, John William Ramsden, Arthur Randall, Buxton William De Winton Randolph, Charles Edward Ray, Richard Cyril Read, Balfour Reason, Sydney Redfern, Ethel Margaret Reinhardt, Cecil Goodwin Rennard, Thomas Ambler Renton, Elwyn George Renton, Gerald Reynolds, James Lewis Rhodes, John Wilfrid Rhodes, Norman Richardson, Alexander Cameron Richardson, John Stocks, B.Sc. Richardson, Thomas Dow Rickaby, John Scoffield Riddett, Norman Lock Rideal, John George Edmund Rider, Martha Hannah, B.A.

Riley, Frank, Afroyd Scholar Roberts, Augustus Alphonso Roberts, James Farrar Roberts, Warren Longtoft Roberts, William Howard Robertshaw, Joseph Robertson, Harry Cecil Robinson, Charles Douglas Robinson, Frank Edward Robinson, William Rossi, Franco Rowbotham, Hemy Robinson Rowe, Claude Hamerton Rudkin, Thomas Sidney Rusby, James Arthur Rushworth, Edgar Rydall, Frederick William

Sanderson, William Edward Scales, Middleton Schoeller, Manfred Scholes, Katharine Louise, Charles Wheatley Scholar Scott, Alice Townley Scott, Harold Martin Scott, Nelly Scott, Percy Seu, Atul Chandra Sen, Gopal Chundra, M.A. Seymour-Jones Arnold Shackleton, Henry Shackleton, Sylvester Shannon, George Strangman Shaw George Lawson Sheard, Percy Shearman, Thomas Sheehan, Patrick Joseph Sheppard, Arthur Shires, Bertram Shuttleworth, Newton Simpkiss, Nellie, L.C.C. Scholar Simpson, Guy Simpson, Thomas Gilroy Singleton, Minnie Singleton, Walter Sinson, Israel Lewis, Akroyd Scholar Sinson, Julius Barnet Sissons, William Wyrill Skinner, Gardiner Skirvankova, Sophie

Slater, Arthur Dickinson Sloman, Annie Smailes, Alan, B.Sc. Smart, William Smith, Bracewell Smith, Eilen, B.Sc. Smith, Gerald Flood Smith, Joseph Smith, Joseph Alfred Smith, Wilfrid Cyprian Broughton Smithells, Frederic Enfield Southern, Alfred Collingwood Spink, Gertrude Annie Stansfield, Samuel Staveley, Frederick Simpson Stephens, Frank George Coad Stephenson, John Runmon Stephenson, Mabel Stevenson, Hugh Stocks, Frank Rubie Stonehouse, Thomas Storey-Bates, William Edward Strainge, Henry William Strange, Edward Howard Strother, Thomas Lancelot William Stroud, Clittord John Regmald Strutt, Raymond Hugh Suffield, George Frank Sugden, Thomas Edward Sutcliffe, Arthur Sutcliffe, Arthur Livsey, Ciothworkers' Textile Scholar Sutcliffe, Ernest Sutcliffe, James Sutcliffe, John Algernon Lacy Swindells, Hemy Kendrick Sykes, Albert Howarth Sykes, Bernal

Tadman, Sidney Stuart
Talbot, John Wilfrid
Taylor, Florence
Taylor, Frances Mande
Taylor, Ronald Cooke
Thomas, Frederick
Thomas, John William
Thomas, Sydney Hardisty, B.Sc.
Thompson, Axel John
Thompson, Geoffrey
Thornton, Edwin

Sykes, Norman Walker

Thornton, Harold Thornton, Oscar Robert Thorp, Hilda, B.A. Thorp, Reginald Pierce Thresh, Abraham Edgai Tolerton, Robert Hill Tomlinson, John Arthur Tonjoroff, Albert Edward Bevan Tonkinson, Edward Bailey Toothill, Joseph Townend, Sydney Townsend, Arthur Townsend, Fred Townsend, Robert, B.Sc. Tsing, Min Poh Tunnicliffe, Eveline Mary Tunnicliffe, William John Wheldale Turner, Frederick William Turner, James Turner, Joseph William Twidale, John Hemy

Vernon, Edgar, *Leighton Scholar* Viccajce, Sohrab Framjee Vince, Eva Mary

Wadsworth, Robert Edgar Walbank, Albert Joseph David Walker, Douglas Walker, Emily Farrington Walker, Ernest Smith Walker, Frank Arthui Walker, Jessie Walker, John Jeffrey Walker, John Perry Walker, Leonard Walker, Robert Francis Walker, Thomas Lockwood Walker, Wilfred Thomas Wallbank, Fred Milhgan Walsh, John Lister Walton, John Wilham Clittord Ward, Alice Rose Ward, Chilord Ward, Edith Ward, Edmund Sykes Ward, Herbert Wainwright Warner, Christopher Brooks Wartnaby, Charles Richard Arnold Waterworth, Joseph Watmuff, Reginald Jonas

Watson, Francis Clark James Scholar Arthur, Brown Watson, Watts, Frank Maxfield Weatherell, Thomas Bertiam Webster, Herbert William, L. C. C. Scholar Weir, James Norman West, William Ernest Westerman, Mabel Wharton, Amy Wheatley, Arthur Nevin Wheatley, Robert Whitaker, Herbert White, Frederick White, Leonard Tinsdale White, Tom M'Call Whitehead, Mary, B.A. Whittingham, Cecil Robert

Scholar
Wilby, Arthur Edwin
Wilby, Maurice
Wilkinson, Edward
Wilkinson, Edward William
Wilkinson, Eltoft Wray
Wilkinson, James Rendall

Whittingham, James Sparrow

Wigglesworth, Frank, Emsley

Wilkinson, John Willbourn, Horace Haynes Williams, James Henry Willis, Lousia Mary Willott, Ernest Spencer Wilmer, Douglas Horsford Wilson, Arnold Wilson, Charles Godfrey Wilson, Charles Leonard Wilson, George Victor Wilson, James Blackburn Wilson, Reginald Kingsdale Winter, John Edgar Wither, John Wood, Bertram William Francis Wood, Charlie Wood, Elizabeth Ann Wood, George (Liversedge), Brown Scholar

Wood, George (Wakefield) Wood, Joseph Durnford Wood, Sydney Herbert Woodcock, Harry Woodhead, Arthur Edmund Woodman, Hilda Woodmansey, Arnold

Zelensky, Lily Aurelia

# School of Medicine

Adderley, Arthur Charles Alderson, William Seaforth

Barrett, Walter Ernest Battle, Harold Edward Bernstein, Isaac Barnett Bibby, James Paley Blackwood, Bertie Booth, Sydney Herbert Bradshaw, Lionel Wilson Braithwaite, Edward Wrigley Brown, Charles Suffield Brown, Herbert Horan Brown, John Perrin Butler, William Harold

Calam, Harold, B.Sc. Carter, William Edgar Cattley, Robert, B.Sc., M.B. Coates, William Robert Addison Cross, George Harold

Dibb, William Land Dobson, Donald Frederick Dobson, Maurice Rowland Dunbar, Dean Dwyer, Maurice

Elliott, Thomas Ellis, Edward Douglas

Farrer, Robert Noel Fisher, John Barugh Flint, Horace Lance Foord, James Maurice Fothergill, Arthur

Frobisher, James Hebblethwaite Martin

<sup>1</sup> Medical Scholar.

Infirmary Scholar.

Gamble, Albert Gau A Grange, Charles D'Oyly Green, Stanley Willoughby Greenwood, George Frederick

Hansell, Alan Waites
Hardy, Digby Wrangham
Harling, Harry Simpson
Hart, Walter Sidney
Harvey, Reginald Simpson
Heppenstall, Clement Hoyle
Hepworth, Sydney Milverton
Hessel, William Thomas
Hill, Philip Keith
Hirst, Benjamin Hattersley
Hodgson, Gorden Alexander
Holtoyde, Gerald
Hooton, William Henry
Howden, Ernest

Ibbotson, Henry Roscoe Ingham, Harold Norman

Johnstone, George Gordon

Keswick, John Barton Thompson Kitchen, John Edward Knowles, Charles Haley

Lamb, Harold Victor
Lamont, James, M.B., C.M.
(Glasgow)
Land, John Murgatroyd
Lyth, John Christopher

Martin, Arthur Francis, M. D. (Vict.) Mason, Harry M. B., Ch. B., (Edin.) McKane, Rudolph John Watford Middlemiss, <sup>1–2</sup> James Ernest Miller, Archibald William Cameron Mitchell, Guy Annesley Carter Mitton, Norman Vernon Montgomery, Raymond Musson, John Percy

Nicol, George Colm Henderson North, Donald North, Herbert Nunneley, Francis William

Oakley, Philip Douglas Oldfield, Carlton, M.D. (Lond.) Ozanne, Ronald Cathcart

Percival, Thomas Godfrey Perlman, Archie Pickles, Clifford Crawshaw Pickles, Philip Dobson Pickles, "William Norman Piercy, Bernard Charles Pinder, William Padgett Prendergast, John Arnoux

Rawlings, <sup>1</sup> <sup>2</sup> Harry Richardson Ray, Matthew Burrow, M.D. Reader, Norbert Leo Maxwell Renton, Harold Ferdinand Rhodes, Arthur Richardson, Alfred Richardson, Cyril Brian Richardson, Gerald Sidney Riley, Arthur

Scargill, Henry Edwin
Scatterty, William, M.D. (Aber.)
Schilling, Joseph Ludwig
Scott, William Graham
Sedgwick, George Henry
Shacksnovis, Reuben, B.Sc.
Sharpe, Claudius Galen Kaye
Sharpe, Frederick Augustus, M.B.,
B.S. (Lond.)
Shaw, William
Slocombe, Bernard Atkinson
Smith, Reginald Eccles
Stanger, Harry
Stockdale, George Vincent
Sutcliffe, Edward

Taylor, John Edgar Thoseby, <sup>1</sup> John Norman Lonsdale Turner, Arthur Henry Twist, Norman Stuart

Vallow, Harold Vickers, Benjamin Randall

Waddington, Charles

<sup>1</sup> Medical Scholar.

<sup>2</sup> Infirmary Scholar.

Waddington, Eric Frushard Walker, George Lister Ward, Rowland Webster, Hugh, L. R. C. P., L. R. C. S. (Edin.) Willans, Esmood Tetley Williamson, William Sugden Wilson, Francis Cecil Wilson, John Black Ferguson

# Number of Students

The following table shows the number of Students of different classes who attended the University of Leeds during the last two Sessions:—

Registered Students:					1905-6.	1906-7.
In Department of M	Iedicine	·			143	122
In Department of	Arts,	Law,	Science	and		
Technology					730	693
Occasional Students in	do.	do			_3	4
Evening Students in	do.	do	•••	•••	285	254
					1,161	1,073

# UNIVERSITY SOCIETIES, 1907-8

The sanction of the Senate is required to the Rules and Regulations of any new Society which it is proposed to establish.

The University Union. The University Union comprises the Cricket, Football (Rugby and Association), and Tennis Clubs, and undertakes the management of the Gymnasium, the Fives Court, and the Debating Society. The Union has also the management of the University Athletic Ground, and undertakes the arrangement of the Athletic Sports, the Conversazione, and other entertainments.

The governing body of the Union consist of a President, three Vice-Presidents, a representative of the Staff, the Hon Treasurer, and a Committee of twenty-three students elected annually.

The subscription to the Union is tos. 6d. annually. It is payable to the Registrar of the University at the beginning of the session, with the class fees, and is compulsory on each registered student attending for more than six hours per week, with certain exceptions.

Membership of the Union carries with it membership of the various athletic clubs under its control, membership of the Debating Society, and the right of using the Common Rooms and the Gymnasium.

Handbooks, containing all information concerning the Union, its Rules, Officers, Athletic Clubs, and also the various Societies, are issued *gratis* to all members of the Union. They may be had on application to the Hon. Secretary or the Hall Porter.

Further information may be obtained from the Hon. Secretary of the Union.

President—The Most Hon. the Marquis of Ripon, Chancellor. Vice-Presidents—A. G. Lupton, Esq., Pro-Chancellor; N. Bodington, M.A., Litt. D., L.L.D., Vice-Chancellor; A. S. Grunbaum, M.D., Dean of the Faculty of Medicine. Charman of Committee—C. Gill. Hon. Secretary—J. R. Bibby. Hon. Treasurer—Professor Connal. Staff Representative—Professor Clapham. Committee—W. F. Clayton, H. Crowther, K. Curtis, A. E. Fletcher, A. E. Hopkins, D. S. Kennedy, J. K. Partridge, M. G. Platts, N. Rhodes, R. H. Tolerton, H. H. Wilbourn, and representatives of the School of Medicine.

The Women's Representative Committee. This Committee is annually elected by the Women Students. It has control of the Women's Common Rooms and appoints representatives on the University Union Committee and sub-committees.

President—Miss B. Murphy. Secretary—Miss C. Burras. Committee—Miss K. M. Beckwith, Miss A. M. Croft, Miss M. Feather, Miss S. K. Findlay, Miss N. Longbottom, Miss M. Westerman.

**The Debating Society.** This Society meets on alternate Mondays in the first and second terms.

President - Professor Clapham. Vice-Presidents - Miss K. L. Scholes, Mr. W. H. Perkins, Mr. L. H. G. Greenwood. Committee - Miss K. Hogan, Miss M. Normington, Miss A. E. Appleyard, A. Seymour-Jones, J. W. Tunnichtte, W. S. Klamborowski. Secretaries - Miss B. M. Murphy, E. W. Wilkinson.

The Literary and Historical Society. This Society meets at 5 p.m. on alternate Mondays during the first and second terms for the reading of papers and discussions on literary and historical subjects. The annual subscription is 4s.

President - Dr. Moorman, Unce-Presidents - Miss K. Hogan and A. Cohen, Pressurer Miss Roberson, Scientific Miss Mallinson and J. E. Winter, Committee Miss Croft, Miss Findley, Miss Simpkiss, L. H. Greenwood, J. Tunnichtte.

The Society for Social Study. This Society has been formed for the purpose of obtaining a good understanding of social questions and schemes of social reform by means of lectures, discussions and other methods. The meetings of the society are open to all members of the University.

President -- Professor Clapham. Vice-Presidents Mrs. Grant, Professors Connal, Smithells and Vaughan, and Mr. Allen. Secretaries Miss Scholes and W. Klamborowski. Committee - Miss Findlay, Miss Normington, W. Cross, A. Perkin, R. Vickers, J. Tunnichtfe.

The Scientific Society. The object of this Society is to develop and maintain interest in the progress of Science by affording opportunities of intercourse between students of the University. The meetings are held during the first and second terms. Members take tea together at 5 p.m., after which papers are read and discussions take place. Any present or past student of the University is eligible for membership. The subscription for Ordinary members is 4s.; for Life members, £1 is. During the third term excursions are made to neighbouring chemical works, dyehouses, &c.

President - Professor Cohen. Vice-Presidents Mr. W. H. Perkins, Hamilton Davies. Ilon. Treasurer - W. E. Cross. Ilon. Secretary -- A. E. Woodhead. Committee - Miss M. Kitson, J. R. Bibby, N. Khodes.

The Biological Society. Members of the University Staff, who are interested in any branch of Natural History, and students past and present, who have completed a course of Elementary Biology, are invited to join. The meetings are conversational, and no lectures or

papers are given. Members are invited to bring interesting natural objects for exhibition. Subscription, is, a year. Meetings are usually held at 5 p.m. on the first Friday in the month, except when this falls in a University vacation. The officers of the Society are a President and Secretary, the latter of whom also acts as Treasurer.

President— Secretary and Treasurer -- E. E. Unwin, M.Sc.

The Education Society. This Society holds two meetings in each of the first and second terms for the discussion of educational subjects. The annual subsciption is 2/-. The list of speakers who have consented to address the Society during the session 1907-8 includes the names of the Vice-Chancellor, and Professor Wright (Newcastle).

President Professor Welton. Vice-President -Miss Robertson. Hon. Secretary-- A. Hinckley. Committee—Miss Feather, Miss Gale, Miss Tunnicliffe, G. Morton, F. W. Turner, F. M. Watts, and Mr. Welpton.

The Engineering Society. This Society has for its object the discussion of subjects bearing upon Engineering and Applied Sciences, the visiting of works and other places of engineering interest, and the promotion of a friendly intercourse amongst its members. It consists of Ordinary, Associate, and Honorary Members and Associates. Any past or present day or evening student of the University is eligible for ordinary membership. Any person not eligible for ordinary membership, but who shall have been netwely engaged in engineering tor a period of not less than five years, or who shall have passed through an engineering training at any University or University College, is eligible as an Associate Member. Any person may be elected an Honorary Member. Any person is eligible as an Associate who is recommended by the Committee as a fit and proper person. Members are elected by ballot at the ordinary meetings. The ordinary meetings are held fortnightly at the University, the chan being taken at 7.30 p.m. Each Ordinary and Associate member pays an annual subscription of 5s. (except present day and evening students, who pay 2s. 6d., and receive no notices of meetings), and each Associate not less than 10s, per annum.

President--Professor Goodman, Hon. Secretary--M. G. Platts, Hon. Treasurer -Wilson Gardner, Commutee -V. C. D. Boyd-Carpenter, P. T. Crowther, D. S. Kennedy, A. W. Purchas (representing day students); F. R. Branston, F. H. Walker (evening students); H. McLaren, W. H. Odgers, S. J. Raynor, H. S. Saunders (past students); A. Towler (associate members).

The Textile Society. The objects for which the Society is established are:

(a) To provide meetings for the discussion of all textile subjects; (b) to stimulate interest among students, manufacturers, and others in all questions relating to textile industries, whether of a scientific, mechanical, or an artistic character; (c) to provide textile journals for the use of members. The subscription of Members is 5s., Day students 3s. 6d., Evening students 1s. a year. Honorary and Life members one payment of  $\mathcal{L}_3$  3s. Honorary members must be gentlemen who have

distinguished themselves in the advancement of textile industries. Former and present students of the University, and gentlemen connected with textile trades generally, may be elected Life members.

Hon Secretary-Thomas Hollis. Hon. Treasurer-J. W. Nixon.

The Agricultural Society. This Society has for its main object the promotion of intercourse between senior and junior students of the Agricultural Department, and affords opportunities of meeting for the discussion of agricultural topics. Papers are read or debates take place fortnightly on Tuesday evenings during the Winter Session. Students of the University or any persons interested in the progress of agricultural science are eligible for membership.

The minimum annual subscription is 1s.

The Musical Society. This Society was formed for the practice of both Vocal and Instrumental Music among the students. The Instrumental section rehearsals are held on Tuesdays at 5 p.m., and the Vocal section rehearsals on Fridays at the same hour. A general meeting of the Society is held on the first Friday in October for the purpose of electing officers for the current session. The annual subscription is 1s.

President--Professor Rogers, Conductor--Mr. T. J. Hoggett, Secretary--T. B. Weatherell, Treasurer--Miss Jowett.

The Christian Union (Men's Branch). Affiliated to the Student Christian Movement of Great Britain and Ireland. Staff-President-Mr. Bennett. Staff-Vice-Presidents - Professors Beaumont and Phillips, Dr. Moorman, Mr. Allen, Mr. Carlton, Mr. Lowson. Student President—W. E. Cross. General Secretary—R. H. Briggs. Hon. Treasurer—G. A. C. Mitchell. Bible Circle Secretary—W. Midgley. Missionary Study Secretary—R. H. Ellis. Daily Prayer Meeting Secretaries—A. E. Dean, and Z. Bentley. Committee—All above-named and A. Peel, W. Smart, A. E. Woodhead.

The Christian Union (Women's Branch). Affiliated to the Student Christian Movement of Great Britain and Ireland. President Mrs. Hellier. Student-President—Miss J. Walker. Secretary—Miss D. Frank. Treasurer—Miss Simpkiss. D.P.M. Secretary—Miss H. Thorp. Bible Circle Secretaries—Miss S. K. Findlay, Miss E. Tunnicliffe. Missionary Secretary—Miss K. S. Scholes. Bombay Settlement Secretary—Miss E. Walker. S. P.M. U. Secretary—Miss J. Walker.

The University Lads' and Young Men's Club. The object of the club is to provide evening recreation for working lads who have left school. The club-rooms in 14, All Saints' Street, York Road, are open every evening except Sundays, from 8 to 10. The rooms are under the supervision of a committee of the club, controlled by a committee of members of the University. In addition to various games, some intellectual occupation is usually afforded. The Secretary will be glad to furnish a copy of the annual report, and to supply additional information.

Hon. Secretary and Treasurer - Professor Cohen. Committee—The Vice-Chancellor, Professors Clapham, Connal, Goodman, Grant

and Smithells; F. H. Brown, E. Kitson Clark, R. N. Hartley, Dr. Hellier, Dr. Moorman, T. H. Taylor, J. J. Wood.

# Societies in School of Medicine

The Students' Representative Council. Elected annually by the students of the Department of Medicine from amongst their own number.

It concerns itself with the affairs of the Medical Students, and appoints representatives to serve on the Committee of the University Union, a proportion of whose funds it has at its disposal.

The Secretary of the Council is ex-officio the Medical Secretary of the Union Committee.

The Council further appoints a sub-committee to manage the Students' Medical Society, and two of its number serve upon the Refectory Committee.

The Medical Society is managed by a Sub-Committee of the Students' Representative Council. Meetings are held on alternate Tuesdays during the first and second terms when papers dealing with subjects of medical interest are read and discussed. The session usually commences with an address, and there is an annual Prize Debate.

The Royal Army Medical Corps (Volunteers), Leeds Companies. Medical Students are invited to join this Corps, as recruits are required annually to keep up the establishment. The Volunteer year commences on November 1st, when the enrolment of members commences. The active part of the Drill season is from the beginning of May to the end of July. The Companies go into Camp, usually for the first week in August, with the Regular Forces at Aldershot, Netley Military Hospital, or York. For further information apply to the Sergeant Instructor at Headquarters.

Commanding Officer-Major de Burgh Birch, M.D.

# Societies of Old Students

The Old Students' Association (Women). The aims of the Association are (1) to hold re-unions three times each session; (2) to provide opportunities of communication between former students by means of a list of addresses to be put in a handbook containing also items of interest from former students, to be sent to all members every two or three years; (3) to provide a loan fund for the use of students whom pecuniary assistance would enable to stay a third or fourth year at the University, and others whom the committee consider eligible. Subscriptions: life membership, 10s.; annual, 1s. 6d.

President—Miss Robertson. Treasurer and Secretary—Miss F. M. B. Turner. Secretary—Mrs. Chapman. Committee 1906-7—Miss L. Allen, Miss C. Brown, Miss Crawshaw, Miss F. Gale, Miss M. Hepworth, Miss F. Porritt. The Committee for 1907-8 will be elected at the November meeting.

<sup>1</sup> The Officers for 1907-8 are not elected in time for insertion in the Calendar.

The Leeds Day Training College Club. The objects of the Club are (1) to provide for a re-union in a social manner of the past students of the Training College, all of whom may become members of the Club; (2) to supply the members with a means of communicating with each other privately, by the annual issue of a list of members and their addresses; (3) to establish a fund which may be used at the discretion of the President for the relief of any past or present student of the Training College who may be in financial distress. Subscription --life membership 10s.; annual, 1s.

President—Professor Welton. Vice-Presidenty—The Vice-Chancellor, Professors Connal, Kendall. Rogers, Smithells, Stroud, Dr. Moorman, Messrs. B. Broadbent, A. R. Dwerryhouse, C. M. Gillespie, A. W. Priestley, A. J. Walker, W. P. Welpton. Secretary and Treasurer.—S. A. Shorter. Committee—J. H. R. Appleyard, A. Charlesworth, M. Denby, J. H. Everett, F. Horn, R. W. Hutchinson, F. Mellor, C. E. Moss, W. Ramshaw, E. Rayner, W. Rigby, A. J. Walker.

#### ENTRANCE SCHOLARSHIPS

The papers set for Entrance Scholarships will be found in the Matriculation Calendar. (See page 136.)

#### DEGREE EXAMINATIONS

The papers set for Degree Examinations are published in one volume, price 1s., or by post from the Registrar to any address in the United Kingdom, 1s. 4d.

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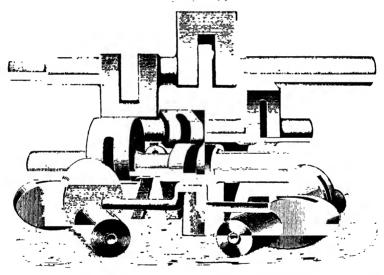
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